U.S. MULTINATIONALS ABROAD:

FDI DETERMINANTS IN THE GLOBAL FOOD SECTOR

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ABSTRACT

U.S. MULTINATIONALS ABROAD: FDI DETERMINANTS
IN THE GLOBAL FOOD SECTOR

Brandon Charles Banner

The following study assesses economic and political determinants of foreign direct investment by U.S. firms. Data from the Bureau of Economic Analysis at the U.S. Department of Commerce was used for total and food sector FDI for 35 countries from the years 2001-2008. Using these data in three econometric models, the paper examines the effect on FDI of regional trade blocs as well as political factors such as labor and credit market regulations, and transfers and subsidies. Finally, the thesis provides a comparison of each model on two dependent variables: food sector and total FDI. The study finds that management decision making for FDI differs for agribusiness firms compared to industry as a whole, especially with regards to the host country's relative wages, language barriers, and membership in the Association of Southeast Asian Countries (ASEAN).

Keywords: Foreign Direct Investment, International Business, Agriculture, Regional Trade Bloc

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To My Family

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CHAPTER I

INTRODUCTION

In the years preceding WWII, the primary vehicle for international business was trade – cross border exporting and importing. After WWII—in particular the 1960s—the multinational enterprise (MNE) began to grow in significance (Hosseini, 2005). An MNE is a firm that conducts business in more than one country by physically locating itself in the countries in which it operates. The distinction between an MNE and a solely domestic firm is that the MNEs operate businesses in more than one country.

MNE can expand internationally either by purchasing an existing company in a host nation or starting a new subsidiary business based in that host country. Such expansion, foreign direct investment (FDI), has become a centerpiece in international business and economics literature. The trend towards global expansion by FDI has increased steadily over the past half century, and today trade flows are far outweighed by FDI activities. The increase in FDI has been accompanied by a vast collection of scholarly articles and data collection that attempt to explain the cause and consequences of this shift away from trade and towards investment.

With developing countries establishing presence in the international business community, international agribusiness has become an important sector for FDI around the world. From 1987 to 2000, cross-border acquisitions in the food sector increased over tenfold, from $4 billion to $50 billion (Herger, Kotsogiannis, & McCorriston, 2005).

Over the past half century, there has been a significant liberalization of FDI policies in the developed world. In the 1990s, developing and transitioning economies

began to follow suit by altering their political framework towards encouraging FDI as well (UN, 2003). Once the political structure has been altered, however, the economic factors that determine the level of FDI inflows take hold. In order for nations to attract FDI, they should understand the economic factors that influence FDI.

Statement of Problem

What are the determinants of US FDI in the global food industry, and how do they differ from FDI across all sectors?

Hypotheses

There are four hypotheses in this paper. The first hypothesis tests the assumption that the variables tested in the literature will perform similarly in the models developed here. The second and third hypotheses relate to new variables this paper adds to the common model, which are regional trade relationships and regulatory variables. Finally, the fourth hypothesis addresses the difference between aggregate FDI (FDI_{tot}) and FDI in the food sector (FDI_{food}). The four hypotheses are as follows:

1. Countries' gross domestic product (GDP) is positively correlated with the amount of inward FDI for that country. Wage levels, tax rates, language differences, and physical distance between the United States and the host country are negatively correlated with FDI.

2. A significant positive relationship exists between countries' affiliation in regional trade agreements (RTA's)[1] and FDI, *i.e.*, RTA's facilitate FDI.

[1] These RTA's include the North American Free Trade Agreement (NAFTA), the European Union (EU), The Southern Common Market (MERCOSUR) and the Association of Southeast Asian Countries (ASEAN).

3. A significant negative causal relationship exists between the target country's credit and labor market regulations with FDI, while a positive relationship exists between countries' level of transfers and subsidies they provide.

4. Food sector and aggregate FDI have different responses by independent variables.

Rationale for Hypothesis

The first hypothesis is in agreement with the large body of literature surrounding FDI determinants. Factors such as market size, wages, physical distance, and language barriers have a strong theoretical backing as to their association with FDI. A country's affiliation with RTAs mainly contributes to its market size. That is, if a firm invests in a country that is involved in a RTA, it will then have access to all the other countries affiliated with that RTA. Hypothesis three addresses regulatory concerns associated with a host country. Here the assumption is that firms are less likely to invest in highly regulated economies. With regards to transfers and subsidies, however, a positive relationship is expected as firms will see opportunities to take advantage of those payments. Finally, recognizing that agribusiness firms have different management concerns and motives, there should be some differences between FDI in the food sector versus FDI in general.

Objectives of Study

1. To test the impact of the addition of government regulation, language differences, and involvement with regional trade agreements on aggregate and food sector FDI.

2. To compare the impact of FDI determinants on food sector FDI and total FDI.

Justification of Study

Along with the general trend of increasing FDI over the past fifty years, MNEs are increasingly choosing to acquire pre-established firms in targeted nations rather than starting new businesses in those markets; in fact, this is especially true for developed country firms, where 90 percent of FDI is executed by acquisition. However, developing and transition economies are increasingly seeing more cross-border M&A activity with a 30 percent increase in the portion of FDI coming from M&A from 1980 to 2005 (Herger, Kotsogiannis, and McCorriston, 2005). Although the past decade (2000 – 2010) has seen a decrease in FDI altogether, the United Nations Conference on Trade and Development (UN, 2003) suggests that FDI is again on the rise and is predicted to reach record highs by 2013.

Yet, the theory of FDI is still somewhat under-developed and under-tested. The aim of this study is to add to the empirical body of FDI literature in order to add to the collective understanding of FDI by testing the theoretical FDI determinants. This research can be beneficial to three main institutions: the international business community, international trade policy makers, and academia.

CHAPTER II

REVIEW OF THE LITERATURE

Literature on FDI has been accumulating since the early twentieth century. In 2009, the International Monetary Fund (IMF) defined FDI as business activity in which one investor or a group of investors are able to exercise control or a significant degree of influence over another entity that is a resident of a different economy. Immediate direct investments exist when an investor owns enough equity to have 10 percent or more of the voting power in the direct investment enterprise. Conversely, trade – as opposed to FDI – occurs when a firm produces a product in their home economy and exports it to a foreign economy. International businesses that solely participate in trade activity have little or no equity positions abroad, whereas firms who participate in FDI activity have long-term investments in one or more economies besides their home economy.

The primary vehicle for international enterprise prior to WWII was trade; however, after WWII and especially in the 1960s, FDI increasingly became a more popular alternative to trade (Hosseini, 2005). Up to that point, scholarly research in the burgeoning field of FDI was sparse; however, the wave of FDI in the 1960s was accompanied by a nearly simultaneous wave in theoretical and empirical research. Stemming from this work was a relatively young yet dominating subject for international business and economics. As research continues, the depth of knowledge is increasing, and the empirical research is refining and reinforcing the theoretical underpinnings from which they stem.

This chapter provides a review of the relevant scholarship pertaining to determinants of FDI. The first section covers the theoretical foundations of FDI, and the second section is a review of the empirical research in the field of FDI. This literature review will only cover components of the theoretical and empirical literature that share a direct link to the empirical work of this paper.

FDI Theoretical Foundations

This section discusses theory explaining FDI, but is not intended to serve as an exhaustive survey of the entire body of literature. This theoretical overview follows the extensive work by Buckley and Casson (1985), which should be referred to for a more exhaustive overview of the theoretical foundations of FDI.

The Hymer Model

Hymer's (1960) work is commonly referenced as the starting point for the modern theory of FDI and the multinational enterprise. However, Buckley and Casson (1985) found traces of the theory in several earlier papers including Coase (1937), Kaldor (1937), Robinson (1931, 1934), Bain (1956), and Dunning (1958). Nonetheless, Hymer's (1960) dissertation at the Massachusetts Institute of Technology provided a clear new direction for future research regarding the international firm.

Before Hymer (1960), research in international economics and business focused on the capital movements theory, which was borrowed from the closely related field of international trade flow. The basis of the capital movements (also referred to as portfolio flows) theory is the interest rate. Since interest rates differ by country, firms that participate in international business will sell their products in markets where interest rates

are higher than their home market offers. The movement of capital towards economies with relatively high interest rates will cause the returns in those countries to decline towards equilibrium where all interest rates are equal. At equilibrium, there will be no change in capital flows until another shock occurs that disrupts the interest rate in one or more of the countries.

Buckley and Casson (1985) summarized Hymer's (1960) work by pointing out two key features inconsistent with the neoclassical capital flows model and the FDI reality. First, Hymer (1960) observed that multinational enterprises (MNE) investing abroad overwhelmingly finance their operations in the target country's capital markets. This misses the capital flows theory because it claims MNE's do not actually treat lower interest rates or capital costs as a competitive advantage. Second, Hymer (1960) found certain countries had considerable FDI concentration, while others did not, with rates of return seeming to play no role in these observations.

Ultimately, the distinction made by Hymer (1960) between FDI and capital flows was that MNE firms choose to make long term physical investments in the target countries even with disproportionately low comparative advantage to firms indigenous to the host country. Barring special conditions, native firms had inherent advantages over international firms because they have a better understanding of their country and its markets, economic-, legal-, political-, and socio-economic-systems. Additionally, foreign firms often faced discrimination by host country government, consumers, and suppliers. The sum of these adverse conditions generally results in considerable added costs for foreign investors and acts as a barrier-to-trade from one country to another. Therefore, firms that choose to participate in FDI activity must have a compensating advantage to

offset such costs. In other words, foreign firms would always be less efficient than domestic firms in a perfect market and thus, FDI would not exist. This distinction moved FDI into the field of imperfect markets: industrial organization.

The Product Cycle Model

The product cycle model originated in the work by Vernon (1966): her theory addressed the process of FDI, mainly with regards to the logical progression of FDI by a firm in terms of likely target countries. Broadly, the theory explains the path of internationalization for a product from its creation. First, since developed countries have high disposable incomes, they are likely to be the country of origin for most new products. As a new product grows in popularity in its home market, interest will be generated in other developed countries, which will give the producers incentive to export their products to those countries as well. Eventually, firms indigenous to the importing country will begin producing substitute or imitation products, thus creating a competitive market in the non-origination country. Since the indigenous firm has an advantage at home due primarily to the transfer costs associated with importing by the non-indigenous firms, the foreign firm is likely to invest directly in the target country. This leads to the final stage of the cycle, where products become standardized, meaning products sell completely on the basis of price competition. In this phase of the model, non-indigenous firms have incentives to invest in less-developed countries in order to utilize on relatively cheaper labor. At this point, the full cycle has been realized.

The Knowledge-Capital Model

Carr, Markusen, and Maskus (2001) presented the "knowledge-capital model of FDI" in order to explain the motives between horizontally and vertically integrated firms. In their model, the activity of multinational firms was tested as a function of various characteristics of the countries involved. They estimated the real volume of production (sales) of foreign affiliates of American parent firms and sales of U.S. affiliates of foreign parent firms using the following predictor variables:

- The sum of the parent and host/target country GDP,
- Squared difference of the host and parent counties' GDP,
- Labor skill differences between the two countries,
- An index (from zero to 100) representing the investment cost of the host country,
- An index (zero to 100) representing trade costs with the host country, and
- Distance (in miles) between the national capital of the parent and host countries.

This model liberated researchers from trying to make the distinction between horizontally and vertically integrated firms, because both show economies of size, skill differences, and trade and investment costs as significant predictors of FDI (Carr, Markusen, & Maskus, 2001).

Internalization

The internalization model addressed firms' incentives to take ownership in their subsidiaries rather than maintain arms-length partnerships with foreign entities. Buckley and Casson (1985) explained their "internalization theory" as an attempt to integrate various theories into FDI models. They described five primary advantages of internalization as follows:

1. The increased ability to control and plan production and in particular to co-ordinate flows of crucial inputs
2. Exploitation of market power by price discrimination prior to full cycle price competition?
3. Avoidance of bilateral market power
4. Avoidance of uncertainties associated with the transfer of knowledge between parties
5. Avoidance of possible government intervention by devices such as transfer prices.

Empirical Studies on FDI

Empirical work on FDI is expansive: two major bodies of empirical literature exist with regards to multinational firms and FDI. The first, firm-level analysis has been conducted and focused on the intangible assets[2], which give MNE's incentive to expand. These assets, including those resulting from managerial prowess, corporate research and development, innovation act as shared technology goods readily transferred within company operating units, easily transferred to new plants and production facilities. Therefore, companies with such assets are more likely to have multiple plants than those without such qualities.

The second group has organized empirical scholarship studies of exogenous factors associated with FDI. These studies deal with the macroeconomic variables thought to determine FDI in a particular country and attempt to explain – though often only implicitly – Hymer's (1960) observation that FDI is concentrated in some countries, while only sparse in others. Ultimately, this latter field of empirical research attempts to

[2] In this context, intangible assets refer to assets that have no physical embodiment, including patents, trademarks, copyrights, business methodologies, and other non-physical sources of future benefit. (Lev, 2005)

identify the variables which contribute to this phenomenon. The following review of empirical work on FDI covers only research on the macroeconomic determinants of FDI since the empirical work of this paper is directed to that field. The interested reader should refer to Blonigen (2005) or Caves (1996) for a more expansive overview of the empirical literature related to FDI and the multinational enterprise.

External factors affecting FDI decisions can be categorized into two overarching areas: economic, political, and social determinants. Some of the empirical work in this area has tested the correlation between one of these categories and FDI, while others have attempted to build a comprehensive model which includes some or all of these characteristics. The literature has focused most particularly on economic determinants; however, recent studies have placed more emphasis on the political and social determinants. Up until the turn of the 21st century, availability of aggregate country-by-country data was a major struggle for FDI empiricists. Because the United States data was one of the only comprehensive and reliable records of FDI around the world, studies dating back more than twenty years generally dealt with FDI inflows or outflows from the United States. More recently, multi-country data has become far more widely available, resulting in a new surge of panel studies that cover FDI throughout the world.

Economic Determinants

Initially, the relationship between exchange rates and FDI was of primary concern in the literature. Early work of Hymer (1960), Kindleberger (1969), and Vernon (1966) shared a common belief that variations in exchange rates would not affect firms' decisions to invest abroad. Results from the work of Froot and Stein (1991) and Klein and Rosengren (1994) suggested flaws in that theory. Both of their models showed an

inverse relationship between exchange rates and FDI inflows. This led to the conclusion that depreciation of a country's currency led to increases in foreign purchases of the developing country's domestic assets. Froot and Stein's (1991) study was somewhat weak due to its small sample size and focus only on US observations, but Klein and Rosengren (1994) provided reinforcements to the claim, which included a large and diverse sample FDI in the US by seven source countries from 1979-1988. Although a few papers'—including Herger, Kotsogiannis, and McCorriston (2008)—results were inconsistent with the claims made by Froot and Stein (1991) and Klein and Rosengren (1994), Blonigen (2005) found a majority agreed with these initial studies.

Another area of interest with regards to economic determinants of FDI is corporate taxes. Generally, the literature agrees host-country company taxes had a significant negative impact on FDI. The studies of tax rates on FDI generally attempt to calculate the tax rate elasticity of foreign investment. These elasticities indicate the size of the reaction by multinational firms to fluctuations in host country tax rates. The majority found negative tax elasticity, meaning a one percent increase in taxes resulted in a less-than-one-percent decrease in foreign investment. De Mooij and Ederveen (2003) disagreed; their meta-analysis compared the outcomes of 25 studies, and the tax rate elasticity of FDI found a median tax rate elasticity of FDI of -3.3. This means a one percent increase in business taxes in a host country would result in a 3.3 percent decrease in country FDI. Nonetheless, this body of literature was primarily concerned with estimating the amplitude – rather than general relationship – of tax rates and FDI.

Political Determinants

The quality of political regimes in a given country is widely accepted as contributing to the FDI inflows and outflows of that country. However, as Blonigen (2005) discussed, quantitative observation in this area is difficult owing to data issues as institutional quality was difficult to measure. Also, the logical argument behind this theory is largely uncontroversial. The basic theory is that a country with poor institutional qualities such as enforcement of contracts, protection of property rights, and shareholder protection will be associated with relatively low levels of FDI, while countries with high quality institutions will be associated with high levels of FDI. For example, few firms will be willing to invest in a country that is going through a major war or that has poor legal protection of property rights. Since institutional quality is difficult to quantify and yet such a subjective theoretical concept is easily accepted or received, research tends to focus on other – perhaps more quantifiable – areas. However, there have been several attempts to identify the political determinants, but which are the most highly correlated with FDI? From this literature, trade protectionism, institutional quality, regional economic blocs (also known as trade blocs) are most common.

Montero (2008) analyzed the political determinants of FDI in Latin America. Using a pooled cross-section time-series data set of fifteen Latin countries from 1985 to 2003, he constructed an econometric model to test the impact of political institutions and economic variables on FDI. He selected variables to categorize into three broad areas: risk-mitigating factors, cost-mitigating factors, and macroeconomic factors.

Risk mitigating factors are those that deal with the transparency and structure of the institutions, as well as the protection of property rights and the availability of legal

recourse. Cost mitigating factors, on the other hand, were those that dealt with the costs of moving capital and of hiring and firing workers. Additionally, marginal tax rates were considered in this section. Finally, macroeconomic factors and the level of economic reform (movement towards a free market system) were considered. Macroeconomic indicators assess market size, population, income, inflation, *etc.*, while the level of economic reform is measured using indices of country relative economic freedom. Montero (2008) determined that only a country's current account balance (exports less imports per unit time) was a consistent predictor of FDI, and that things such as degree of integration into global markets, level of development, and relative economic freedom were not consistent predictors.

Busse and Hefeker (2007) analyzed political factors affecting FDI in the developing world using an econometric model to estimate FDI inflows for 83 developing countries with political and institutional factors. Those factors included government stability, socio-economic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tension, law and order, ethnic tension, democratic accountability, and the quality of the bureaucracies. The most robust results were government stability, internal and external conflict, corruption, ethnic tensions, law and order, democratic accountability of government, and quality of bureaucracy.

Finally, there is an offshoot literature that analyzes the effect of regional trade blocs on FDI. A trade bloc is a group of countries – usually relatively close in geographic proximity – that participate in open and free trade. Theoretically, one would expect to see the level of FDI to be relatively higher in countries who participate in trade blocs since the investment would provide the auxiliary benefit of easier trade amongst

countries within the trade bloc. Motta and Norman (1996) and Donnenfeld (2003) explained the concept of "export platform" FDI. This type of FDI was directly linked to countries with regional economic integration regimes – also known as trade blocs – like the North American Free Trade Agreement (NAFTA, Canada, Mexico, and USA), the European Union (EU), the Association of Southeast Asian Countries (ASEAN), *etc*.

Broadly, the theory states that when faced with many options of countries to invest in, multinational firms are more likely to invest in those which are involved in regional trade blocks because that investment provides them the ancillary benefit of market access to the countries that are associated with the trade bloc. Motta and Norman (1996) developed a game theoretic model to explain this, and Donnenfeld (2003) provided a special equilibrium model to explain the effects of inter- and intra- bloc trade on FDI. To date, no explicit empirical study focused on this area has been conducted.

Social Determinants

Social determinants of FDI are those determinants that are associated with human development factors of the labor force in a country. Human development is a broad term that can be used to describe a multiplicity of human characteristics. While there has not been much focus on the theoretical aspects of human development on FDI, there are some empirical studies that have examined these characteristics. For example, Suliman and Mollick (2009) tested for correlation between literacy rates and war to FDI in Sub-Saharan Africa and found that literacy rates and civil liberties have positive correlation with FDI inflows, while war events exert a strong negative force on FDI inflows.

Comprehensive Deterministic Models

Recent studies have attempted to bring an array of determinants into a predictive model for FDI. Bandelj (2002) analyzed the institutional, political, economic, and social connections between a host country and FDI. She found variables within each category of politics, institutions, and culture had a strong correlation with FDI including bilateral investment treaties, being a member of the EU, the amount of foreign aid, and strong cultural ties between host and source country.

Schneider and Frey (1985) created four econometric models to test various political and economic determinants of FDI in developing countries. One model used only economic determinants, one used only political determinants, another used an amalgamated index of political and economic variables, and the final model used both political and economic variables. Of these models, the simultaneous inclusion of economic and political indicators performed best. Real GDP per capita and low balances of payments were the top economic determinants (and were both positively related to FDI), while the amount of bilateral aid coming from the western world and multilateral aid were the political variables with the most positive effect. The authors also found that help from communist countries and political instability had the most negative effect on capital inflow.

FDI and the Global Food Sector

Though recently slowed with the global financial crisis of 2007-2011, FDI remains a substantial component in global economic expansion. United Nations Conference on Trade and Development (UNCTAD) (UN, 2011) predicted global FDI

would return to pre-crisis levels in 2013. The next growth wave is expected to be driven by FDI in the developing – rather than developed – world. 2010 was the first year developing economies absorbed almost half of the global FDI inflows, while simultaneously generating a record level of FDI outflows (UN, 2011). In these countries, the food sector is relatively large in proportion to the economy as a whole. Therefore, the increase in FDI in these countries could result in an increase in FDI in the food sector.

Although recent literature covering FDI is extensive, only few studies have addressed FDI in the food sector directly. First, Muehlfeld, Weitzel, and van Witteloostuijn (2011) studied factors affecting the completion or abandonment of mergers and acquisitions (M&A) in the food sector. Second, McCorriston and Sheldon (1998) studied FDI in the United States by foreign firms. Third, Nils, Kotsogiannis and McCoriston (2008) studied cross border acquisitions in the food industry using data that spans a panel of countries. Finally, Makki, Somwaru, and Bolling (2004) compared food industry FDI between developed and developing countries.

Muehlfeld, Weitzel, and van Witteloostuijn (2011) examined transaction-, firm- and institution-level factors that either facilitated completion or contribute to the abandonment of M&A in the global food sector. Using announced and completed acquisition data from the Thomson Financial Securities Data's "Worldwide Mergers and Acquisitions Database," the authors estimated a logit regression model with M&A completion as the dependent variable. Controlling for factors such as location, type of investor, and industry segment, a chi-square statistical test was used to test the significance of the various factors they predicted would contribute to the success of an acquisition.

One of the key findings of this study was that "difficult (strained) institutional environments" from developing and transition economies greatly reduced the probability of a successful M&A completion. Surprisingly, they also found cross-border deals had a positive impact on the completion rate of an announced acquisition, implying cross-border deals were less likely to be abandoned than their domestic counterparts. Overall, the study concluded that a friendly transaction attitude, cash payment, and recent experience with M&A were the strongest contributors to the successful completion of an acquisition. Conversely, bidding competition and simultaneous acquisition pursuits by the acquiring firm were among the factors that contributed most negatively to M&A completion rates.

McCorriston and Sheldon (1998) discussed FDI of foreign firms purchasing U.S. food companies from the years 1985 to 1995. In these years, almost all of the FDI was in the form of cross-border acquisition for the food sector, while total FDI (all industries) consisted of about 80% acquisition. Their paper examined relative wealth effects on FDI in the manufacturing industry. Variables used were relative stock price indices and real exchange rate. FDI was divided into 5 sectors: food, chemicals, fabricated materials, machinery, and other manufacturing. Their model consisted of a range of binary variables; the study concluded that relative wealth effects have some power in explaining cross-border acquisitions in each industry except the food industry. One of the primary weaknesses in this study was that it only looked at FDI in America by foreign firms.

Nils, Kotsogiannis, and McCoriston (2008) used UNCTAD data to look at global acquisitions in the manufacturing sector from 1987-2000. They analyzed cross border M&A; however, these transactions made up nearly 80% of all FDI, the results should be

consistent with results using the same model to predict FDI inflows. The food industry ranked among the leading sectors for acquisition in terms of overall M&A deal value. The USA is a major player in cross border acquisitions in the food industry as well as the UK, Netherlands, France, and Germany. Also, it was often the case that food companies topped lists of biggest cross-border deal for any given year.

The food sector is one of the leading sectors in terms of acquisitions in both the US and EU. For the food sector, food processing accounts for 78% of M&A deals, while retailing accounts for 10% and wholesaling and agricultural production are minor activities. Their paper provided a useful overview of a large set of data encompassing over 46 countries from 1997-2004 and food sector merger activities. Because value data is difficult to acquire, this model uses count panel data, which tells us the number of acquisitions but not their corresponding value. An econometric model is produced to predict the effect of economic variables on the number of acquisitions in a host country. The results mainly agreed with the existing literature; however, they found a relationship between exchange rates and investment, which is inconsistent with the general body of literature.

Makki, Somwaru, and Bolling (2004) analyzed the differences between FDI in developed and developing countries. Their study concluded that market size was the most important characteristic and was positively correlated to FDI. Because the demand for processed food increases as incomes increase, the study found that FDI is positively correlated with per capita income in developing countries yet negatively correlated in developed countries. The latter conclusion can be explained because developed countries already consume large quantities of processed foods. As income in these countries rose,

the demand for special diets consisting of more fresh and less-processed foods increases, thus decreasing demand for more-processed foods. The study also concluded that openness to trade was a significant factor for FDI in developed countries, but not critical in developing countries. A negative correlation between FDI and exchange rate was found, which is consistent with their hypothesis; however, statistically significant rates only appeared in developed countries FDI. Also, relative wages did not appear to be a critical factor for developed or developing countries and neither did the U.S. interest rate.

Summary of the Literature Review

Despite its relatively short existence, the literature on FDI is rich with both theoretical and empirical research. Once Hymer (1960) presented the industrial organization approach – an alternative to the traditional perfect markets approach – to analyzing FDI flows, a vast body of literature studying the market imperfections which impact FDI ensued. This literature has identified an assortment of variables which impact FDI including those that are economic, political, and socio-economic in nature. This thesis will add to this body of literature in two ways. First, the study provides a comparison between the determinants of food sector and total FDI. Second, the paper will provide an extensive analysis on the effects of regional trade blocs and regulatory factors on FDI in total and in the food sector specifically.

CHAPTER III

METHODOLOGY

The Logic of the Model

The underlying model for this paper is that FDI is a function of economic and political conditions in the host country. Therefore, the primary concern of this study is the linkages between economic and political variables and FDI. The models build on the model by Herger, Kotsogiannis, and McCoriston (2008), with the ultimate aim of assessing the effects of country language, regulatory conditions, and affiliation in regional trade blocs on FDI. These independent factors will be used to predict two dependent variables: U.S. FDI in the food sector and total U.S. FDI.

Procedures for Data Collection

This analysis is comprised of data from 35 countries from the years 2001-2008. The countries were selected based on the availability of the data for the dependent and independent variables from models specified previously as Equations 1, 2, and 3 (see Table 1).

Data Collection Problems

The goal of this study was to examine FDI by American firms in as many host countries as available. The two dependent variables, Total FDI and Food Sector FDI, from the United States Department of Commerce's Bureau of Economic Statistics (BES)

provided a historical account of US FDI outflows to 35 host or receiving countries.[3] After observations for all the independent variables were collected, the time span had become limited to the years 2001-2008, resulting in a pooled sample size of 282.

Proxies

There were two occasions where proxies were required to fill holes in the data. First, both FDI_{tot} and FDI_{food} had some country-years that were undisclosed only for one or two of the years in the time span. For these observations, a simple median was calculated between the year prior and the year after. There were few occasions where more than one year was missing in a row, in which case an arithmetic mean of the total observable periods for that country during the 2001-2008 time span was used. Second, relative wage rates were not observable for all the countries and years. The UBS Prices and Earnings Report is updated once every three years and has a more expansive dataset for each new release. Therefore, almost every country chosen for this study is represented in the newest edition of the UBS Prices and Earnings Report (2009), while several countries were not included in the prior editions. For these countries, gross domestic product per capita (GDPPC) provides wage proxies for major cities in each country relative to New York City wages as a base 100.0. For the wage proxies, the GDPPC was compared to the GDPPC in the United States and "scaled down" to reflect relative GDPPC with the United States' observation as base or 100.0.

[3] The BES database provides FDI information for over 70 countries; however, more than half of the observations were not disclosed in order to protect investments made by individual firms.

Procedures for Data Analysis

The determinants of firms' FDI will be categorized into two broad areas: economic and political factors. To test these determinants, three models will be constructed to observe the linear relationships between each determinant and FDI. These econometric results will be evaluated based on the t-value from the regression output at the 0.01, 0.05, and 0.10 levels. Also, the performance of the model as a whole will be evaluated using the F-statistic at $\alpha = 0.10$ level.

The first model establishes a baseline which the second and third models will enhance. The baseline model closely follows Herger, Kotsogiannis, and McCoriston (2008) with a few minor adjustments. Thus it covers the factors of market size, trade cost, relative labor cost, financial factors, and language barriers. Host country GDP was selected to represent market size, while trade costs are seen as a function of U.S. and host country distance. Relative labor costs were represented by a labor index from the Fraser Institute's *Economic Freedom in the World Report* (2010), in which each country is given a score that represents the cost of labor relative to the rest of the world. A similar index was used for relative country tax rates to represent the financial factors. Finally, host country official language dummy variables were included.

The goal of the second model is to observe the impact of regional trade blocs on FDI. The model will build on model 1 by incorporating dummy variables for regional trading blocs North Atlantic Free Trade Agreement (NAFTA), the European Union (EU), the Association of Southeast Asian Nations (ASEAN), and the Common Southern Market (MERCOSUR), the world's major RTAs.

Finally, model 3 tests the impact of three political variables: labor market regulation, credit market regulations, and transfers and subsidies, again nested within earlier models.

Model 1: Baseline Model

Model 1 goals are twofold: first, the results of this model should be contrasted to a known result comparison for both food sector and total FDI and secondly creating this model is to provide a base model to which the variables in models two and three can be added.

The model examines the effects of market size (*GDP)*, relative wages *(Wage),* physical distance *(Distance)*, corporate tax rate *(Tax*), Exports (*Exports*), and language differences (*Spanish, French, Other Languages)* for time (t=2001, 2008) and country (i=1, 35).

Equation 1. US Firms' FDI Baseline Model.

$$FDI_{i,t} = B_0 + B_1 GDP_{i,t} + B_2 Wage_{i,t} + B_3 Distance_{i,t} + B_4 Tax_{i,t} + B_5 Exports_{i,t} + B_6 Spanish_{i,t} + B_7 French_{i,t} + B_8 Other\ Languages_{i,t} + \varepsilon$$

Model 2. Baseline Plus Regional Trade Blocs

The objective of the second model is to study the impact of countries' involvement in regional trade agreements on FDI. For this model, the four most predominant RTA's were selected and include: NAFTA, EU, ASEAN, and MERCOSUR for time (t=2001, 2008) and country (i=1, 35). For each RTA, a dummy

variable is used to indicate the countries' involvement. The four RTA's are expected to produce significant positive relationships with FDI.

Equation 2. Baseline Model with Regional Trade Bloc Addition.

$$FDI_{i,t} = B_1 GDP_{i,t} + B_2 Wage_{i,t} + B_3 Distance_{i,t} + B_4 Tax_{i,t} + B_5 Exports_{i,t} + B_6 Spanish_{i,t} + B_7 French_{i,t} + B_8 Other\ Languages_{i,t} + B_9 NAFTA_{i,t} + B_{10} EU_{i,t} + B_{11} ASEAN_{i,t} + B_{12} MERCOSER_{i,t} + \varepsilon$$

Model 3.Baseline Plus Regional Trade Blocs and Regulatory Variables

The third model will observe the impact of regulation on FDI. Adding to model 1, this model will include variables from the Frazer Institute's *Economic Freedom in the World* report. The variables are Labor Regulations *(LaborReg),* Credit Market Regulation *(CreditReg),* and Transfers and Subsidies *(Transfers)* for time (t=2001, 2008) and country (i=1, 35). Of these variables, labor regulations and credit market regulation are index values, while transfers and subsidies are in constant U.S. dollars. The regulatory indices, including labor regulations, credit regulations, and transfers and subsidies are expected to have a negative impact on FDI, while trade openness is expected to have a positive influence on FDI.

Equation 3. Regulatory Determinants Model

$$FDI_{i,t} = B_1 GDP_{i,t} + B_2 Wage_{i,t} + B_3 Distance_{i,t} + B_4 Tax_{i,t} + B_5 Exports_{i,t} + B_6 Spanish_{i,t} + B_7 French_{i,t} + B_8 Other\ Languages_{i,t} + B_9 NAFTA_{i,t} + B_{10} EU_{i,t} + B_{11} ASEAN_{i,t} + B_{12} MERCOSER_{i,t} + B_{13} LaborReg_{i,t} + B_{14} CreditReg_{i,t} + B_{15} Transfers_{i,t} + \varepsilon$$

Comparison of the Models

Equation 4. Chow F-Statistic for Variable Inclusion

$$F = \frac{\left[\frac{(SSR_0 - SSR_1)}{(df_0 - df_1)}\right]}{\left[\frac{SSR_0}{Df_0}\right]}$$

Where: SSR_0 = sum of the squared residuals for the base or original model,
SSR_1 = sum of the squared residuals for the expanded model,
Df_0 = Degrees of freedom for the base model, and
Df_1 =Degrees of freedom for the expanded model.

After, models 2 and 3 are subject to a Chow F test for variable inclusion.

In addition to the comparison between the three models, an ancillary aim of this study is to determine the model with the greatest predictive capacity. Since model one's arguments are retained or nested in model two and model two is nested in model three, Chow-F tests were used to the contributions of the added variables. The Chow F test calculates the reduction of unexplained sums-of-squares residuals per additional degree of freedom used compared to a first model (model 1) and it follows an F distribution. The calculation for the Chow F value is shown in Equation 4.

Table 1. List of Variables for the Three US FDI Models, 2000-2008.

Indicator	Units	Description	Source
		Dependent Variable	
Food Sector FDI	U.S. Dollars	New investment dollars by U.S. firms in the global food sector.	BEA
Total FDI	U.S. Dollars	New investment dollars by U.S. firms in foreign countries	BAE
		Independent Variables	
Model 1 Baseline – Traditional FDI factors.			
Market Size	GDP US $	Market value of all final goods produced in the host country *i* in year *t* .	IMF
Distance	Miles	Physical distance between capital cities of the host country *i* and US	Google Maps
Exports	U.S. Dollars	Annual sum of all goods and services produced in host country, but exported.	IMF
Wage	Index	Difference in mean wages in host countries and the US.	UBS Prices and Earnings
Taxes	Percent	Difference between host & US total tax rate.	World Bank *Doing Business* Survey
Spanish	Dummy	1 if Spanish official language, 0 else	CIA *World Fact Book(WFB)*
French	Dummy	1 if French official language, 0 else	CIA *WFB*
Other Languages	Dummy	1 if official language other than English, Spanish, or French	CIA *WFB*

Model 2	**Regional Trade Bloc Influences**		
NAFTA	Dummy	1 a member of NAFTA, 0 else.	WTO *Regional Trade Agreements Database(RTAD)*
EU	Dummy	1 if a member of the EU, 0 else.	WTO *RTAD*
ASEAN	Dummy	1 if a member ASEAN, 0 else.	WTO *RTAD*
MERCOSUR	Dummy	1 if a member of MERCOSUR, 0 else.	WTO *RTAD*
Model 3	**Political Impact Additional Regulatory Variables**		
Labor Laws	Index	Host government regulates hiring, firing, minimum wage setting, and work hours.	*Economic Freedom in the World Report (EFWR)*
Credit Laws	Index	Regulated bank ownership, competition with foreign banks, and interest rates.	*EFWR*
Subsidies and Transfers	Percent	Total value of transfers and subsidies as% of GDP.	*EFWR*

Assumptions

Randomness of Sample

The number of countries used in the sample as well as the time span was based on data availability. The observations are assumed to be random; however, some biases may exist for countries where data is available versus countries with no data availability.

Statistical Considerations

This study assumes the four principle justifications for regression analysis – linearity, independence, homoscedasticity, and normality – meet the requirements for statistical inference. To ensure the assumption of linearity holds true, real versus predicted values were plotted and observed. Since this is a time series experiment, an autocorrelation plot was created to observe independence between variables. Finally, normality is assumed and was examined using a basic normality test.

Investment Success or Failure

Since the value of all investments was used as the independent variable, no consideration was given to the quality of each investment. Since this study is an attempt to evaluate the relative attractiveness of investment, this should have no impact on the value of the results.

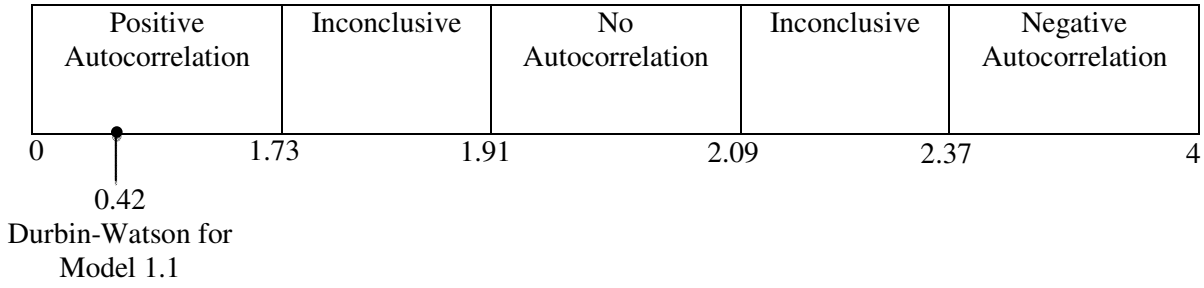
CHAPTER IV

DEVELOPMENT OF THE STUDY

Serial Correlation Issues

Serial correlation was identified in baseline model (Model 1) using the Durbin-Watson test for serial correlation. In this test, the time-series component of the data is analyzed to determine if successive residual errors ($e_t \sim e_{t-1}$) correlation exists, a violation of ordinary least squares assumptions. After applying the test to the data used in this study, such serial correlation was identified. For model one, the Durban-Watson Statistic was 0.42, which suggests the error terms had high 1st order positive autocorrelation.

Figure 1. Durbin-Watson Statistic for US FDI Model 1.1.



The remedy for serial correlation used was an application of the Johnson, Johnson, and Buse (1987) transformation of the data for serial correlation correction by adjusting the error terms using a three step process:

1. Calculate $\hat{P}$ $\qquad\qquad \hat{P} = 1 - \frac{1}{2}(d)$

Where d = the Durbin-Watson d-statistic.

2. Transform the data using the following equations to obtain Y^* and X^*

$$Y^* = Y_t - pY_{t-1}$$

$$X^* = X_t - pX_{t-1}$$

3. Then, execute the regression analysis using the transformed data.

Applying these steps to each data observation brought the Durbin-Watson result to an acceptable range, meaning the autocorrelation was adjusted out of the data. Appendix 3 shows the results for original (non-adjusted) data with Durbin Watson statistics.

Table 2. Results for US FDI_{tot} and FDI_{food} Models for 35 Countries from 2001 through 2008.

	Model 1		Model 2		Model 3	
Dependent Variable	1.1 Total FDI	1.2 Food Sector FDI	2.1 Total FDI	2.2 Food Sector FDI	3.1 Total FDI	3.2 Food Sector FDI
Constant	45868 *** (6.79)	590.2 *** (2.87)	37460 *** (4.85)	316.3 (1.25)	23878 ** (2.36)	515.1 (1.54)
GDP	50.68 *** (4.63)	1.6485 *** (4.95)	63.71 *** (5.66)	1.801 *** (4.92)	65.05 *** (5.76)	1.7883 *** (4.84)
Wage	298.7 * (1.62)	-5.972 (-1.06)	373.8 ** (2.10)	-4.921 (-0.85)	380.6 ** (2.09)	-4.913 (-0.82)
Distance	-17769 *** (-5.51)	-314.62 *** (-3.24)	-17326 *** (-4.12)	-220.6 * (-1.60)	-17504 *** (-4.18)	-221.2 (-1.59)
Exports	-26.98 (-1.31)	-0.3613 (-0.56)	-132.88 *** (-4.91)	-2.5169 *** (-2.71)	-130.72 *** (-4.83)	-2.5593 *** (-2.73)
Tax	-1332 (-0.72)	85.97 (1.51)	-102 (-0.06)	115.64 ** (2.03)	-399 (-0.23)	120.6 ** (2.11)
Spanish	-34029 *** (-6.13)	-495.2 *** (-2.94)	-35409 *** (-6.51)	-496.3 *** (-2.82)	-33219 *** (-6.04)	-533.8 *** (-2.96)
French	-9518 ** (-2.09)	-60.3 (-0.44)	-14423 *** (-3.27)	-109.2 (-0.77)	-13272 *** (-3.00)	-125.3 (-0.87)
Other Languages	-19293 *** (-5.49)	-305.8 *** (-2.89)	-19034 *** (-5.69)	-279.2 *** (-2.60)	-16388 *** (-4.67)	-319.2 *** (-2.81)
NAFTA			44836 *** (5.92)	928.6 *** (3.66)	43286 *** (5.65)	951.3 *** (3.69)
EU			8744 ** (2.43)	224.6 ** (1.90)	10310 *** (2.74)	203.3 * (1.63)
ASEAN			13734 *** (2.97)	106.3 (0.72)	12885 *** (2.79)	114.7 (0.77)
MERCOSUR			-2232 (-0.53)	15.6 (0.11)	362 (0.08)	-24.5 (-0.17)
Labor					5106 ** (2.07)	-80.25 (-1.00)
Credit					289 (0.13)	-5.01 (-0.07)
Transfers					2812 (1.19)	-33.08 (-0.43)
Summary Statistics						
R-squared (%)	34.9	16.3	46	21.4	47.1	21.7
F-statistic	18.38 ***	6.56 ***	19.15 ***	6.00 ***	15.87 ***	4.85 ***
Durbin Watson	1.887	2.002	2.028	2.054	1.992	2.058
Degrees of Freedom	273	273	269	269	266	266

Notes: Coefficients significant at the 10% level are labeled with *, at the 5% level with **, and at the 1% level with ***. The number in parentheses is the t-value for each coefficient. All regressions are GLS models after correcting for first order serial correlation.

Analysis

Table 2 presents the results relating to the determinants of FDI_{tot} and FDI_{food} by American companies abroad. The first column for each model presents generalized least squares (GLS) coefficients after finding substantial first order serial correlation.

GDP or market size had a positive significant relationship at the 0.01 level in all six models. This result agrees with the conceptual argument that greater FDI receiving country GDP (or larger market size) the greater chance of attracting FDI.

Wage levels were positive and significant in each of the FDI_{tot} models, but insignificant in each of the FDI_{food} models. The positive sign for wage level suggests that FDI tends to occur in countries with a more highly paid, and a more highly skilled workforce is implicit. This suggests that the effect of companies' investing abroad in order to take advantage of low wages is outweighed by firms seeking a more sophisticated labor market or a higher income consumer market.

Taxes are insignificant in all but two models. The two models revealed significant results at $\alpha = 0.05$ level were FDI_{food} two and three. It is difficult to explain why the introduction of the regional trade blocs to the model would cause the tax rates to become significantly correlated in the food sector, as signs were positive, suggesting higher taxes increase investment. One explanation would be that certain trade blocs, such as NAFTA and the EU, tend to have higher tax rates and, therefore, higher quality public goods such as roads in rural areas.

Exports between the host country and the U.S. were insignificant in the base model for both total and food sector FDI; however, the second and third models exports were significant and negative. In these models, the exports variables act as a proxy for

openness to trade, which obviates interest in FDI. More export activity between countries suggests fewer tariff and non-tariff barriers to trade. A negative correlation may suggest companies use FDI as a strategy for avoiding barriers-to-trade.

All three models included a language component. Dummy variables were set up to identify official country language per the *CIA World Factbook* (2011). Spanish or Other Languages showed significant negative correlation, an American language barrier. French speaking countries had negative correlation with FDI_{tot}, but no correlation with FDI_{food}. This implies language barriers may have been greater deterrents to FDI in other industries than in the food sector.

Of the four RTAs used in model 2 (NAFTA, EU, ASEAN, MERCOSUR), NAFTA displayed the most positive and significant results. This is an expected outcome, since the United States is a member of NAFTA and two other members are both proximal countries. Additionally, the EU showed consistently significant influence on FDI both in food sector and all industries, but at roughly one-quarter the level of NAFTA. ASEAN showed positive results in the aggregate FDI models, while not significant for food sector investment, it was a significant positive relationship FDI_{tot}. The food sector represents a lower regional interest by food firms as compared to other countries or regions.

The models which included labor market, credit market, and transfers and subsidies indicators provided only one significant observation. The labor market regulation index showed a positive relationship to FDI_{tot} at the five percent level. This is most likely because the FDI tends to flow first towards more developed countries, despite those countries tending to have higher levels of labor market regulation.

Differences Between Food Sector and Aggregate FDI

Several differences occur between FDI_{tot} and FDI_{food}. These differences imply that management decisions differ for food processor or agribusiness MNEs than for MNEs throughout the rest of industry. The results of this study show differences in five areas: wages, language, distance, association with the ASEAN trade bloc, and labor market regulations (see Table 2).

In the first model, the distance from the host country to the US was significant and negative, which is consistent with the hypothesis that longer distance represents higher transfer costs, which shares a negative relationship with FDI. In models two and three, however, distance did not share any relationship with FDI but still showed a significant and negative relationship with total FDI. This implies that the inclusion of regional trade blocs, which were added to model two, have an influence on distance for food sector FDI while having no effect on total FDI.

From the results, we can see that U.S. FDI is more probable in ASEAN member-countries in general; however, food and agribusiness companies are not significantly more inclined to invest in ASEAN member-countries. One explanation for this is that ASEAN member countries have large manufacturing industries that American firms are interested in acquiring, whereas the agribusiness sector in these countries is relatively small and unattractive to investment.

French-speaking countries produced a negative and significant output for aggregate FDI but no significant results were captured for food sector FDI. This implies that firms generally are less inclined to invest in French-speaking countries, but

agribusiness firms' decision to invest in a country is not contingent on whether the host country is English or French speaking.

Model Predictive Performance

Table 3 shows the results of the Chow-F test for all six models. Models numbered 1.1, 2.1, and 3.1 are the three FDI_{tot} models, and models 1.2, 2.2, and 3.2 are the FDI_{food} models. Each row in the table represents the comparison of two models, and columns 3 through 6 provide the values necessary to execute the Chow-F test.

Table 3. Chow F Test Results for FDI_{food} and FDI_{tot} Models

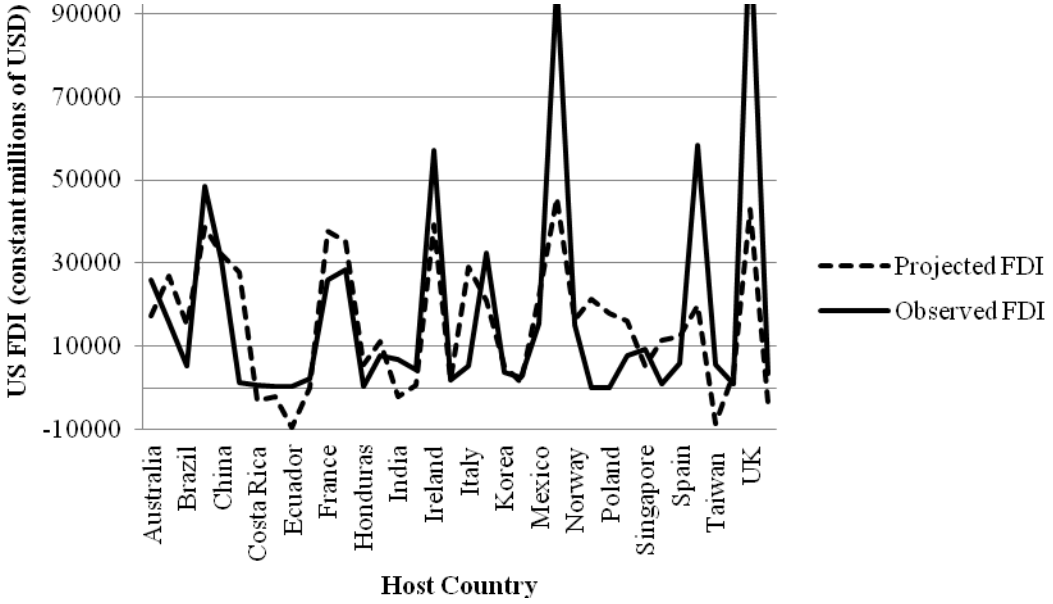
Reduced Model	**Expanded Model**	**SSR (reduced)**	**SSR (expanded)**	**Df (reduced)**	**Df (expanded)**	**Chow F-value**
1.1	2.1	1.05653E+11	87715167422	274	270	13.804 *
2.1	3.1	87715167422	85837050141	270	267	1.947 *
1.1	3.1	1.05653E+11	85837050141	274	267	8.805 *
1.2	2.2	94714444	89019015	269	265	4.239 *
2.2	3.2	89019015	88602644	265	262	0.410
1.2	3.2	94714444	88602644	269	262	2.582 *

As Table 3 shows, model 3.1 is the best model for determining FDI_{tot}, whereas model 2.2 is best model for predicting FDI_{food}. This implies the *Freedom in the World* indicators for transfers, subsidies, and credit and labor market regulations have a greater influence on aggregate FDI than FDI in the food sector specifically. However, when looking specifically at the food sector, these variables do not add predictive value to the model and, therefore, do not significantly affect FDI in the global food sector.

The performance of the model varies when the predicted FDI values are plotted against observed FDI. The predicted values closely resemble the observed FDI values in

many instances. Overall, as Figure 2 below shows, the general level of predicted versus observed FDI across all countries at any given point in time is relatively accurate.

Figure 2. Predicted Versus Observed FDI for All Countries (2008).



Also, as Figures 3 and 4 show, the model performs well for single countries over the time span of 2001-2008 in many cases, especially for developed countries where the data does not change drastically from year to year.

Most cases of poor model performance showed highly negative FDI predictions. As Figure 5 shows, one of the variables in the model has a tendency to severely impact the model outcome when it interacts with the rest of the model. This tended to happen with Spanish speaking countries more than others, but there are cases where Spanish speaking countries performed well (Figure 3), and there are examples of non-Spanish speaking countries yielding the same outcome (Figure 6). Also, there seems to be no

regional pattern for this so it doesn't seem to be traceable back to any one dummy variable. See appendix two for prediction versus actual graphs for all countries over all years.

Figure 3. Predicted Versus Observed FDI in Spain (2001-2008).

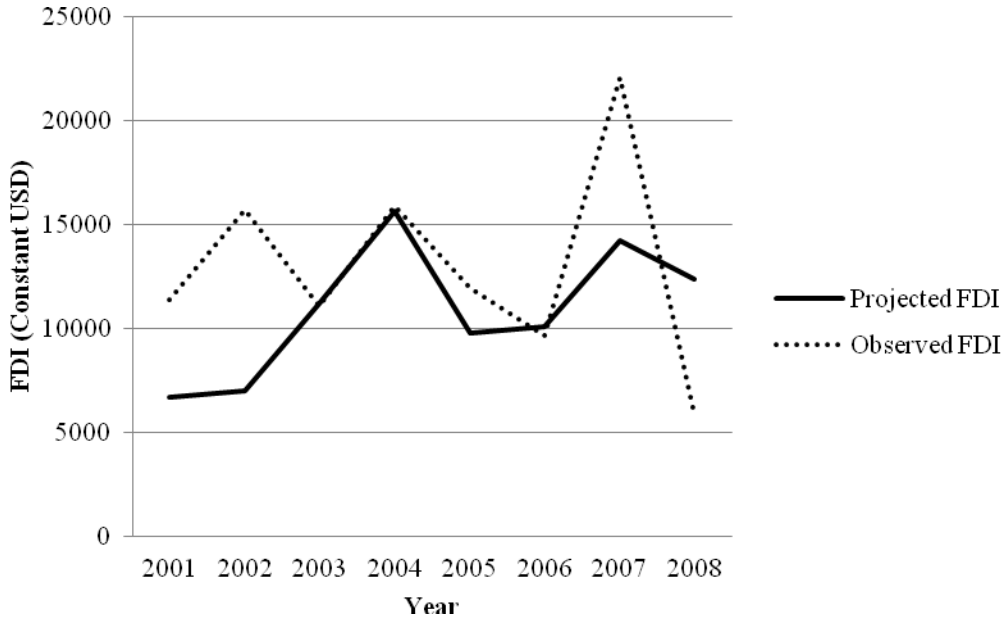


Figure 4. Predicted Versus Observed FDI in Korea (2001-2008).

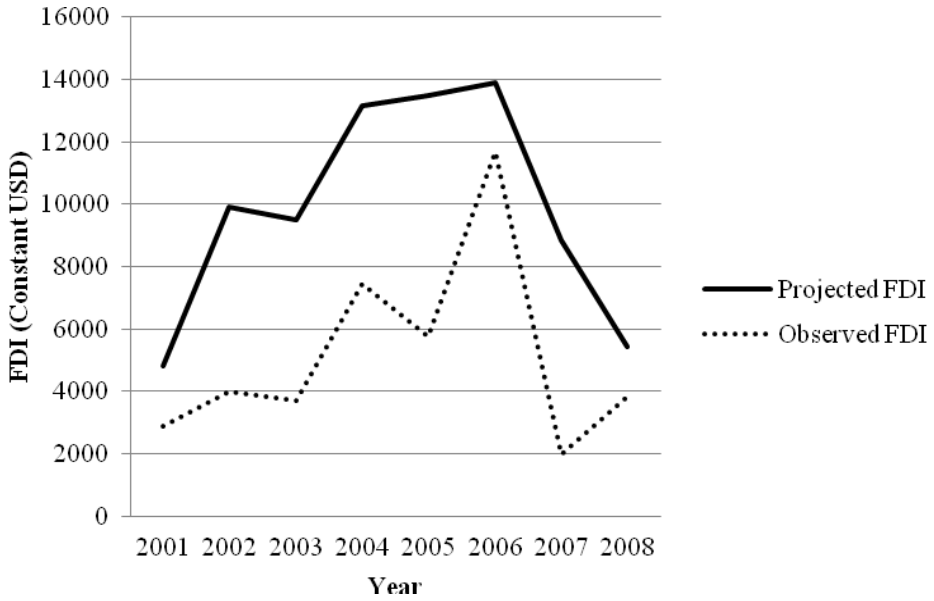


Figure 5. Predicted Versus Observed FDI in Ecuador (2001-2008).

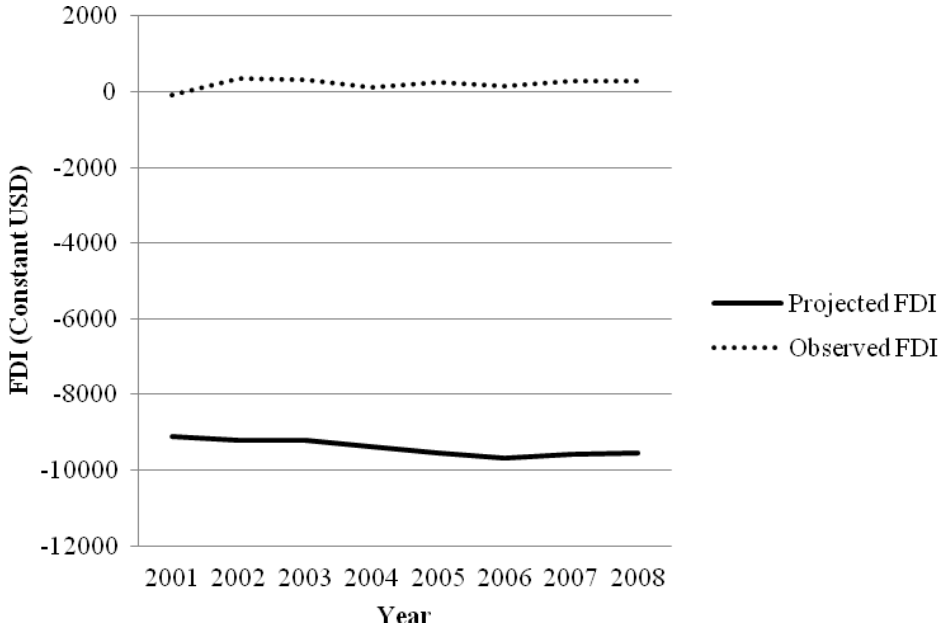
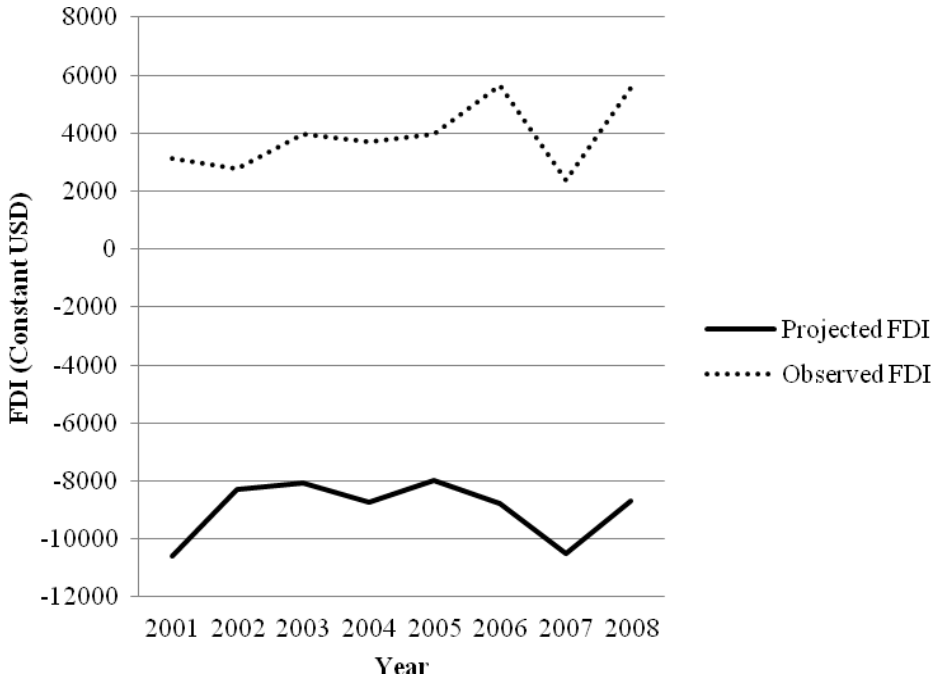


Figure 6. Predicted Versus Observed FDI in Taiwan (2001-2008).



CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This paper has presented a simple model for FDI that examines language, regional trade association, and regulatory barriers as determinants. The determinants were analyzed for FDI across all sectors as well as FDI in the food sector alone. Therefore the aim of this paper was twofold: 1) to analyze the observations of FDI determinants, and 2) to compare the results for the aggregate FDI model with the results from the food sector FDI model. Three models were used to estimate the effects of market size, taxes, distance, wages, exports, language barriers, association with RTAs, and regulations on FDI.

The results in this study agree largely with the theoretical hypotheses from which it was conducted. Market size and association with regional trading blocs generally have a positive impact on FDI, while distance and language differences generally have a negative impact on FDI. The results for countries that are members of the MERCOSUR trade bloc didn't show any correlation with FDI, which suggests that countries' involvement in MERCOSUR is neither an incentive or deterrent in the FDI decision making process for American firms. Finally, with only one exception, the variables in model three – Labor and Credit Market Regulations, and Transfers and Subsidies – were not correlated with FDI in the food sector or in total.

In each model, wages were positively correlated in FDI_{tot}, but showed no correlation with FDI_{food}. The positive correlation with aggregate FDI suggests that American firms are more likely to invest in higher income countries where the population

has higher disposable income to spend on the good or service they provide. Agribusiness firms, on the other hand, show no correlation with wage levels in the countries in which they choose to invest. This can be explained using the principle that low-income earners spend a proportionally larger amount on food than those with higher incomes. Therefore, investment in the food sector is more likely to be profitable in low-income countries where people have less disposable income than other sectors of the economy.

Recommendations and Suggestions for Further Research

Data Availability Improvement

Data availability and variable identification are the primary weaknesses of this study. As data becomes more available, the analysis could be strengthened immensely. This study was only able to observe FDI determinants for developed countries, which excludes much of the world for analysis. It would add strength to the model if more countries could be included. Also, variable identification was difficult for analyzing regulatory determinants. The three variables used come from an index that ranks countries based on various determinants of their own. Each index is a proxy in itself and is simplified into a 1-10 scale. This makes analysis difficult because there isn't much variability between observations. Finally, a longer time series would be beneficial for analysis in order to show countries before and after accession into regional trade blocs.

Model Performance Improvement

As discussed in the results section, certain models predicted highly negative FDI. This outcome could be caused by a number of issues including problems with the

coefficients from the indicator variables or the need for inclusion of one or more independent variables in the model. A more thorough evaluation of the statistical elements of the model could yield more plausible results.

Analysis of New RTAs

With the newly formed Central American Free Trade Agreement (CAFTA) and the promising development of the Trans-Pacific Partnership (TPP), new and interesting relationships are being formed in the global marketplace. It would be interesting to see the results of this study against a new set of future data that reflects these new partnerships.

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LIST OF APPENDICES

APPENDIX 1

Complete Data Set of US FDI for 35 Countries from 2001 through 2008.

		Dependent Variables		Model 1									Model 2					Model 3		
Country	**Year**	**Total FDI**	**US Food Sector FDI**	**GDP**	**Wages**	**Exports**	**Distance**	**Taxes**	**English**	**Spanish**	**French**	**Other**	**NAFTA**	**EU**	**ASEAN**	**MERCOSUR**	**Labor Market Regulation**	**Credit Market Regulation**	**Transfers and subsidies**
Australia	2001	255.98	215.67	30.07	19.058	-8.235	2.0781	0.63	1	0	0	0	0	0	0	0	4.66295	4.69742	8.24796
Belgium	2001	8390.3	107.64	24.17	24.876	5.0409	0.8112	0.21	0	0	1	0	0	1	0	0	4.55028	4.65572	8.24796
Brazil	2001	3020.6	-680.94	17.27	-3.015	6.4412	0.8862	1.155	0	0	0	1	0	0	0	1	4.97173	4.69245	8.24796
Canada	2001	47948	710.51	71.22	5.6726	204.84	0.0958	2.63	1	0	1	0	1	0	0	0	4.88840	4.71315	8.36240
China	2001	3280.4	103.06	197.92	8.4106	-68.57	1.4542	1.26	0	0	0	1	0	0	0	0	5.00016	4.52977	8.20163
Colombia	2001	204.53	22.1	9.60	-0.135	-75.09	0.4991	1.155	0	1	0	0	0	0	0	1	4.97986	7.42084	8.29428
Costa Rica	2001	479.36	26.01	1.94	2.2632	-1.625	0.4300	1.47	0	1	0	0	0	0	0	0	4.97986	7.43356	8.29428
Dominican Republic	2001	213.03	39.72	3.01	1.6819	1.9033	0.3097	1.89	0	1	0	0	0	0	0	0	4.89902	7.43356	8.29428
Ecuador	2001	-78.28	13.04	4.54	1.693	-1.295	0.5678	1.68	0	1	0	0	0	0	0	1	4.81620	7.18356	8.29428
France	2001	6448.9	179.64	145.57	18.106	29.711	0.8043	0.21	0	0	1	0	0	1	0	0	3.70288	6.50700	8.70921
Germany	2001	19545	139.06	194.50	22.947	35.054	0.8757	1.63	0	0	0	1	0	1	0	0	5.26617	6.28810	8.70921
Honduras	2001	-88.21	7.14	1.02	0.717	-43.54	0.3826	1.89	0	1	0	0	0	0	0	0	5.46061	7.12200	8.70921
Hong Kong SAR	2001	10811	4.84	16.43	0.4504	7.1762	1.7110	2.1	1	0	0	0	0	0	0	0	5.43524	6.64348	8.70921
India	2001	616.59	-5.19	56.78	2.7927	2.1169	1.5721	1.68	0	0	0	1	0	0	0	0	5.36504	9.00000	7.59673
Indonesia	2001	3476.8	7.73	14.74	4.4416	2.411	2.1342	1.26	0	0	0	1	0	0	1	0	5.36504	8.58221	7.45906
Ireland	2001	11178	-125.76	14.84	29.163	10.518	0.7103	0.55	1	0	0	0	0	1	0	0	5.48128	8.76321	7.09597
Israel	2001	2739.4	13.2	12.09	4.1131	-2.655	1.2382	0.525	0	0	0	1	0	0	0	0	5.47779	8.72747	7.52987
Italy	2001	4330.6	144.66	126.26	15.877	14.342	0.9416	0.63	0	0	0	1	0	1	0	0	5.98794	7.67474	8.59401
Japan	2001	10549	-12.12	170.00	-5.616	107.68	1.4226	1.05	0	0	0	1	0	0	0	0	6.10849	6.67536	8.38965
Korea	2001	2892.3	89.92	40.07	1.6734	-64.73	1.4568	1.55	0	0	0	1	0	0	0	0	5.69636	6.61644	8.38965
Malaysia	2001	1240.1	8.32	9.34	4.5723	-5.453	2.0011	1.68	0	0	0	1	0	0	1	0	6.11303	6.60141	8.80654
Mexico	2001	21456	122.67	92.43	2.5046	113.69	0.3955	2.05	0	1	0	0	1	0	0	0	5.87380	6.48237	8.61316
Netherlands	2001	56498	-1334.4	49.29	26.165	-94.24	0.8077	0.025	0	0	0	1	0	1	0	0	5.94148	7.62154	8.63760
Norway	2001	986.59	5.62	19.27	51.807	-2.314	0.8132	0.735	0	0	0	1	0	0	0	0	5.94148	7.67288	9.34605
Philippines	2001	2562	33.7	5.87	1.4084	7.2153	1.7978	1.47	1	0	0	0	0	0	1	0	6.50177	8.06755	9.34332
Poland	2001	1504.6	138.45	28.91	6.6756	-7.995	0.9364	0.735	0	0	0	1	0	0	0	0	6.35906	7.87310	9.34605
Russia	2001	-23.13	70.87	53.90	8.9264	5.5118	1.0200	2.155	0	0	0	1	0	0	0	0	5.92127	7.95446	9.49377
Singapore	2001	21699	3.1	6.23	5.7808	10.051	2.0284	1.89	1	0	1	0	0	0	1	0	6.15721	7.47849	9.49377
South Africa	2001	256.02	-9.17	5.91	0.3166	-7.418	1.7025	0.84	1	0	0	0	0	0	0	0	5.54031	7.48121	9.51226
Spain	2001	11398	191.75	76.90	13.823	1.6956	0.7939	1.84	0	1	0	0	0	1	0	0	6.12364	7.48992	9.57221
Switzerland	2001	20020	36.74	29.26	35.111	5.5637	0.8610	1.68	0	0	1	0	0	0	0	0	5.97208	6.57342	8.11444
Taiwan	2001	3110.6	53.66	16.11	5.7304	25.735	1.6504	1.47	0	0	0	1	0	0	0	0	6.47285	7.35277	8.00272
Thailand	2001	1575	13.19	8.90	-0.211	-11.64	1.8448	1.47	0	0	0	1	0	0	1	0	6.47285	7.30066	8.25341
United Kingdom	2001	45928	1550.18	151.21	26.912	29.734	0.7697	0.05	1	0	0	0	0	1	0	0	6.39305	7.44612	8.41125
Venezuela	2001	1749.5	106.88	15.62	-0.728	-17.43	0.4323	1.68	0	1	0	0	0	0	0	1	6.31597	7.44612	8.41125
Australia	2002	17129	-153.56	67.74	12.446	-5.569	2.0781	0.63	1	0	0	0	0	0	0	0	3.57005	4.45025	9.85831
Belgium	2002	7881.7	30.72	37.16	17.021	4.6884	0.8112	0.21	0	0	1	0	0	1	0	0	3.66945	4.85025	9.85831
Brazil	2002	2296.7	114.71	31.47	2.3306	8.0332	0.8862	1.155	0	0	0	1	0	0	0	1	3.76667	6.65025	9.85831
Canada	2002	45918	1450.41	89.23	12.731	196.62	0.0958	1.05	1	0	1	0	1	0	0	0	3.90556	6.85025	9.85831
China	2002	1026	165.09	217.17	3.1736	-39.99	1.4542	1.26	0	0	0	1	0	0	0	0	3.76590	6.85025	9.85831
Colombia	2002	155.62	-36.52	10.57	2.0579	-93.3	0.4991	1.155	0	1	0	0	0	0	0	1	3.92900	7.95019	9.59128
Costa Rica	2002	353.35	25.9	2.05	2.2053	-1.286	0.4300	0.47	0	1	0	0	0	0	0	0	3.92900	7.95019	9.59128
Dominican Republic	2002	101.36	-1.35	2.87	1.4671	1.6867	0.3097	0.89	0	1	0	0	0	0	0	0	3.68345	7.95019	9.59128
Ecuador	2002	351.59	39.72	4.25	1.4914	-1.15	0.5678	1.68	0	1	0	0	0	0	0	1	3.73673	7.95019	9.59128
Egypt	2002	661.97	-12.22	6.09	0.3583	-0.337	1.2200	1.47	0	0	0	1	0	0	0	0	4.01252	7.01056	9.21526
France	2002	11649	585.2	212.76	13.24	27.169	0.8043	0.71	0	0	1	0	0	1	0	0	4.01252	6.41056	9.10082
Germany	2002	10990	-576.22	279.60	16.599	40.196	0.8757	0.84	0	0	0	1	0	1	0	0	4.91667	5.33345	9.70845
Honduras	2002	1.67	2.14	0.95	0.6075	-46.12	0.3826	1.89	0	1	0	0	0	0	0	0	5.36111	5.40608	9.68392
Hong Kong SAR	2002	14659	6.68	16.73	7.7107	6.7517	1.7110	2.1	1	0	0	0	0	0	0	0	5.17320	5.49904	9.55586
India	2002	2260.2	2.03	66.05	3.2107	4.4492	1.5721	0.68	0	0	0	1	0	0	0	0	4.97846	6.26326	9.43869
Ireland	2002	20361	32.66	21.76	15.744	14.819	0.7103	0.945	1	0	0	0	0	1	0	0	4.85917	6.26620	6.92371
Israel	2002	1230.9	-10.32	7.96	8.1322	-5.31	1.2382	1.025	0	0	0	1	0	0	0	0	4.96225	6.32700	6.92371

Italy	2002	5693.4	273.14	181.10	11.033	14.412	0.9416	1.13	0	0	0	1	0	1	0	0	4.98487	8.41694	3.40256
Japan	2002	22504	56.28	351.17	16.934	102.29	1.4226	1.05	0	0	0	1	0	0	0	0	5.03532	8.41198	3.40256
Korea	2002	3974.2	175.28	95.06	7.5868	-60.36	1.4568	1.655	0	0	0	1	0	0	0	0	5.38890	8.24046	3.40256
Malaysia	2002	1184.7	-12.58	14.67	3.595	-4.093	2.0011	1.68	0	0	0	1	0	0	1	0	5.27779	8.14202	3.03542
Mexico	2002	14793	1171.5	75.48	2.281	115.65	0.3955	2.26	0	1	0	0	1	0	0	0	5.46332	8.21133	3.28065
Netherlands	2002	41742	68.91	65.43	16.041	-96.5	0.8077	0.42	0	0	0	1	0	1	0	0	5.51494	9.13222	3.32970
Norway	2002	2532.7	5.83	30.44	23.529	-1.938	0.8132	0.735	0	0	0	1	0	0	0	0	5.51494	9.21572	3.34332
Philippines	2002	1669.6	90.28	11.21	1.3388	6.3642	1.7978	1.47	1	0	0	0	0	0	1	0	5.43385	9.21531	3.19074
Poland	2002	618.33	20.9	25.23	3.2231	-7.566	0.9364	0.735	0	0	0	1	0	0	0	0	5.61549	9.21531	3.41962
Russia	2002	437.43	27.86	55.08	2.7521	5.9945	1.0200	2.365	0	0	0	1	0	0	0	0	2.85448	8.15396	2.28716
Singapore	2002	18751	1.31	11.26	6.6446	9.3749	2.0284	2.89	1	0	1	0	0	0	1	0	2.80692	8.00005	2.28716
South Africa	2002	908.7	-68.52	9.01	4.7355	-7.66	1.7025	1.34	1	0	0	0	0	0	0	0	3.34499	8.11250	2.28716
Spain	2002	15744	-46.93	110.87	9.0868	2.5462	0.7939	1.05	0	1	0	0	0	1	0	0	3.53943	8.09419	2.00817
Switzerland	2002	23852	-194.1	41.13	23.69	4.853	0.8610	1.68	0	0	1	0	0	0	0	0	3.68972	8.10083	2.34060
Taiwan	2002	2796.2	21.9	36.36	8.0083	24.736	1.6504	1.47	0	0	0	1	0	0	0	0	3.93736	7.98957	2.29428
Thailand	2002	2895	5.24	18.99	1.7107	-10.6	1.8448	0.47	0	0	0	1	0	0	1	0	3.93736	8.11651	2.55586
United Kingdom	2002	67650	-978.24	241.20	16.264	29.059	0.7697	1.84	1	0	0	0	0	1	0	0	3.89171	8.21595	2.89918
Venezuela	2002	716.49	214.86	-3.19	2.281	-17.09	0.4323	0.68	0	1	0	0	0	0	0	1	3.93644	8.21595	2.94550
Australia	2003	17579	377.45	107.92	12.446	-5.51	2.0781	0.63	1	0	0	0	0	0	0	0	5.72123	7.01010	9.04632
Belgium	2003	7090.7	92.53	58.17	17.021	5.074	0.8112	0.21	0	0	1	0	0	1	0	0	5.15321	7.59469	9.04632
Brazil	2003	7750.6	211.09	82.24	2.3306	9.8991	0.8862	1.155	0	0	0	1	0	0	0	1	5.02885	8.23866	9.04632
Canada	2003	56439	683.13	147.99	12.731	207.45	0.0958	1.05	1	0	1	0	1	0	0	0	5.27885	7.97646	9.04632
China	2003	2910.7	192.25	253.40	3.1736	-22.62	1.4542	1.26	0	0	0	1	0	0	0	0	5.01719	8.22587	9.98365
Colombia	2003	701.62	-27.48	8.51	2.0579	-114	0.4991	1.155	0	1	0	0	0	0	0	1	5.41891	8.92036	10.00000
Costa Rica	2003	-584.4	20.37	2.12	2.1708	-1.68	0.4300	2.26	0	1	0	0	0	0	0	0	5.41891	8.75000	9.91281
Dominican Republic	2003	39.43	-2.5	0.02	-0.182	1.7975	0.3097	1.68	0	1	0	0	0	0	0	0	5.59143	8.63646	9.72207
Ecuador	2003	335.89	-31.35	4.59	1.5368	-0.798	0.5678	1.68	0	1	0	0	0	0	0	1	4.96244	8.72476	10.00000
Egypt	2003	1405.2	0.42	5.80	0.3207	-1.007	1.2200	1.47	0	0	0	1	0	0	0	0	8.55466	8.83386	9.83651
France	2003	16984	281.34	336.18	13.24	28.316	0.8043	0.815	0	0	1	0	0	1	0	0	8.74068	8.82064	9.83651
Germany	2003	24014	78.29	435.53	16.599	45.029	0.8757	1.84	0	0	0	1	0	1	0	0	9.34549	8.93169	8.60763
Honduras	2003	129.01	-15.91	1.02	0.6168	-50.5	0.3826	1.89	0	1	0	0	0	0	0	0	9.45660	8.93824	8.59183
Hong Kong SAR	2003	4566.1	-22.27	14.26	7.7107	6.2341	1.7110	2.1	1	0	0	0	0	0	0	0	9.33458	8.90149	8.83379
India	2003	1524.7	8.56	97.10	3.2107	6.0629	1.5721	1.47	0	0	0	1	0	0	0	0	9.14518	9.22189	8.40872
Ireland	2003	19842	65.08	32.18	15.744	18.23	0.7103	0.945	1	0	0	0	0	1	0	0	9.19301	9.26195	8.93188
Israel	2003	2496.5	-6.25	14.89	8.1322	-7.571	1.2382	1.63	0	0	0	1	0	0	0	0	9.31175	9.28080	8.93188
Italy	2003	4312.9	1048.13	283.52	11.033	15.327	0.9416	0.735	0	0	0	1	0	1	0	0	6.05368	6.35450	8.59284
Japan	2003	5284.3	43.69	577.75	16.934	97.959	1.4226	1.05	0	0	0	1	0	0	0	0	6.07473	6.31722	8.59284
Korea	2003	3696.8	183.86	96.96	7.5868	-56.02	1.4568	1.26	0	0	0	1	0	0	0	0	6.90444	6.30966	8.59284
Malaysia	2003	1447.2	-2.31	15.61	3.595	-3.971	2.0011	1.68	0	0	0	1	0	0	1	0	6.78474	6.41942	8.59284
Mexico	2003	12372	428.39	70.75	2.281	117.96	0.3955	1.47	0	1	0	0	1	0	0	0	7.11914	6.45744	8.89373
Netherlands	2003	61218	6638.38	100.28	16.041	-98.11	0.8077	1.42	0	0	0	1	0	1	0	0	7.26528	6.76068	8.73569
Norway	2003	2735.5	6.04	38.07	23.529	-3.421	0.8132	0.735	0	0	0	1	0	0	0	0	7.26528	6.83694	8.72207
Philippines	2003	1678.4	72.83	9.88	1.3388	5.9258	1.7978	1.47	1	0	0	0	0	0	1	0	7.27326	6.92734	8.72207
Poland	2003	1039.5	65.68	30.79	3.2231	-6.623	0.9364	0.735	0	0	0	1	0	0	0	0	7.28965	6.89442	8.72207
Russia	2003	1614.4	49.98	82.30	2.7521	7.5722	1.0200	1.575	0	0	0	1	0	0	0	0	4.96936	6.45899	8.30200
Singapore	2003	10799	4.1	12.35	6.6446	8.3296	2.0284	2.1	1	0	1	0	0	0	1	0	4.75898	5.85899	8.30200
South Africa	2003	946.14	20.21	42.52	4.7355	-7.334	1.7025	0.945	1	0	0	0	0	0	0	0	4.65000	6.19841	7.77929
Spain	2003	11098	209.21	178.75	9.0868	3.0234	0.7939	2.05	0	1	0	0	0	1	0	0	4.84444	6.00948	7.65123
Switzerland	2003	34109	8.76	54.31	23.69	5.4107	0.8610	1.68	0	0	1	0	0	0	0	0	4.75992	6.10263	7.22888
Taiwan	2003	3969.2	12.53	36.67	8.0083	23.158	1.6504	1.47	0	0	0	1	0	0	0	0	4.93247	8.08617	7.22888
Thailand	2003	744.54	-27.6	21.81	1.7107	-9.785	1.8448	1.26	0	0	0	1	0	0	1	0	4.93247	8.08617	7.22888
United Kingdom	2003	81364	873.59	303.31	16.264	30.804	0.7697	1.05	1	0	0	0	0	1	0	0	5.29410	8.08617	7.22888
Venezuela	2003	1587.9	83.84	4.56	2.281	-16.67	0.4323	0.97	0	1	0	0	0	0	0	1	5.10774	7.83617	7.22888
Australia	2004	23785	407.45	115.68	27.778	-5.992	2.0781	0.63	1	0	0	0	0	0	0	0	5.34739	8.39393	4.20170
Belgium	2004	20182	104.04	57.27	21.37	6.4853	0.8112	0.21	0	0	1	0	0	1	0	0	5.51329	8.39393	4.20170
Brazil	2004	6138.1	948.68	113.81	12.883	11.327	0.8862	1.155	0	0	0	1	0	0	0	1	7.61580	8.60013	4.20170
Canada	2004	66448	-310.56	153.49	26.256	239.64	0.0958	1.05	1	0	1	0	1	0	0	0	7.27918	8.80365	4.20170
China	2004	8719.8	-29.12	318.03	-0.439	-5.842	1.4542	1.26	0	0	0	1	0	0	0	0	7.39906	8.80365	4.20170
Colombia	2004	800.33	51.81	22.23	2.5586	-148.1	0.4991	1.155	0	1	0	0	0	0	0	1	7.47759	9.00000	6.94005
Costa Rica	2004	2023.4	61.37	2.32	2.183	-2.399	0.4300	1.47	0	1	0	0	0	0	0	0	7.47759	9.00000	7.00545
Dominican Republic	2004	383.36	15.77	2.75	1.2424	1.8938	0.3097	1.68	0	1	0	0	0	0	0	0	7.54152	9.00000	6.80654
Ecuador	2004	110.75	4.2	5.08	1.5801	0.707	0.5678	1.68	0	1	0	0	0	0	0	1	7.58267	9.00000	6.23161

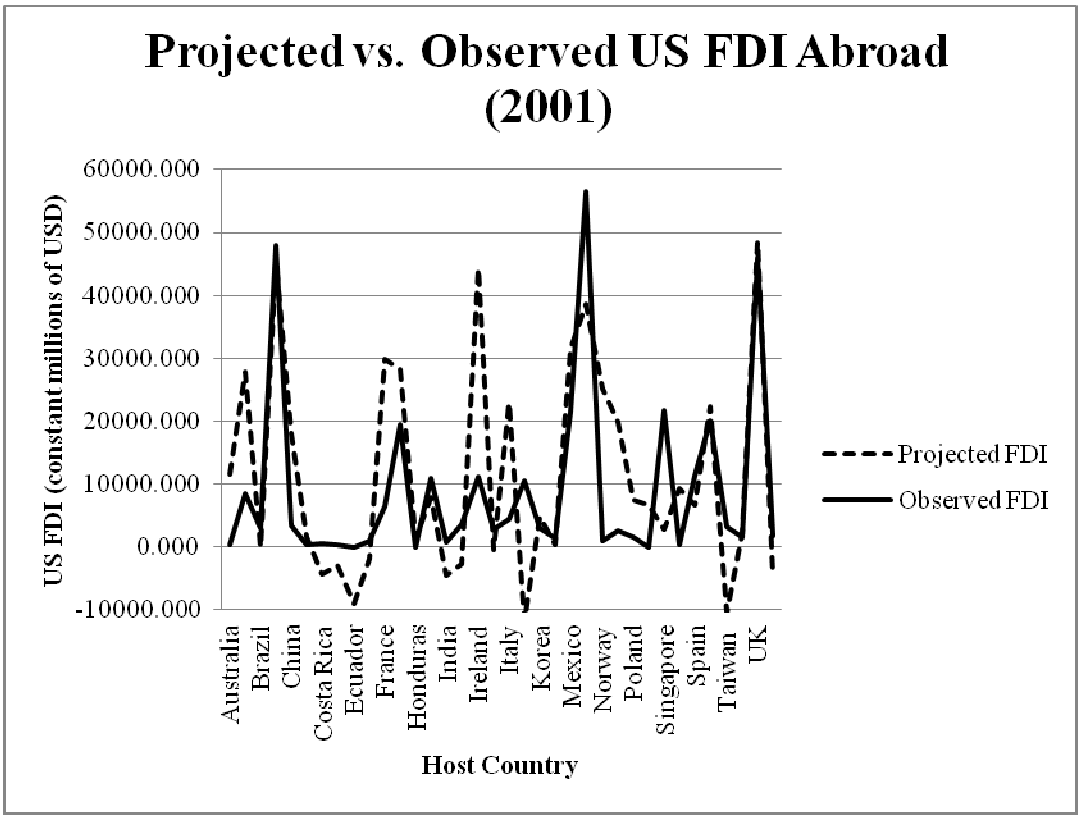
Egypt	2004	1742	4.42	6.77	0.3505	-2.1	1.2200	1.47	0	0	0	1	0	0	0	0	4.26263	6.03902	3.90000
France	2004	22888	672.53	316.75	18.694	30.592	0.8043	0.42	0	0	1	0	0	1	0	0	4.30883	6.25421	4.00000
Germany	2004	22380	605.16	402.52	23.505	52.297	0.8757	1.05	0	0	0	1	0	1	0	0	4.67729	6.94885	6.60000
Honduras	2004	540.12	-8.53	1.16	0.6471	-57.4	0.3826	1.89	0	1	0	0	0	0	0	0	4.64951	6.69820	6.60000
Hong Kong SAR	2004	3958.5	8.48	19.73	-1.607	6.4383	1.7110	2.1	1	0	0	0	0	0	0	0	4.82729	6.96456	7.00000
India	2004	3812.3	0.77	110.87	4.5215	8.2141	1.5721	-0.53	0	0	0	1	0	0	0	0	4.86570	7.52485	7.30000
Ireland	2004	25030	-13.78	30.65	29.073	18.908	0.7103	0.945	1	0	0	0	0	1	0	0	4.78997	7.74206	7.32425
Israel	2004	625.2	31.13	16.05	8.6198	-7.132	1.2382	0.84	0	0	0	1	0	0	0	0	4.82927	7.50486	7.36785
Italy	2004	6941.3	-559.38	267.54	14.595	16.602	0.9416	0.735	0	0	0	1	0	1	0	0	3.52713	7.10648	4.63964
Japan	2004	25348	105.53	622.54	14.296	107.61	1.4226	1.05	0	0	0	1	0	0	0	0	3.58644	6.90543	4.63964
Korea	2004	7427.2	92.92	105.80	15.659	-56.38	1.4568	1.26	0	0	0	1	0	0	0	0	4.86910	7.62534	4.63964
Malaysia	2004	3334	43.69	18.72	2.1758	-8.294	2.0011	1.68	0	0	0	1	0	0	1	0	4.92465	7.52572	4.19619
Mexico	2004	18472	517.14	101.45	2.3191	133.64	0.3955	1.47	0	1	0	0	1	0	0	0	5.35164	7.58457	4.19619
Netherlands	2004	72155	-780.46	91.21	16.654	-110.7	0.8077	0.63	0	0	0	1	0	1	0	0	6.48564	8.05189	4.47139
Norway	2004	2557.3	-15.75	40.23	28.486	-3.327	0.8132	0.735	0	0	0	1	0	0	0	0	6.48564	7.98535	4.19074
Philippines	2004	1127.9	-67.71	12.34	1.2634	3.9948	1.7978	1.47	1	0	0	0	0	0	1	0	6.17043	8.05038	4.19619
Poland	2004	3794.2	240.48	40.86	7.1749	-5.396	0.9364	0.735	0	0	0	1	0	1	0	0	6.30232	7.91096	4.08174
Russia	2004	4104.3	159.98	128.21	9.547	10.452	1.0200	1.575	0	0	0	1	0	0	0	0	6.48482	6.87707	6.81199
Singapore	2004	20744	-2.48	18.46	7.3035	5.9762	2.0284	2.1	1	0	1	0	0	0	1	0	6.40190	6.87707	6.81199
South Africa	2004	1084.8	16.41	43.93	18.685	-6.198	1.7025	0.945	1	0	0	0	0	0	0	0	8.05486	7.64024	6.81199
Spain	2004	15925	176.46	173.43	21.566	2.6538	0.7939	1.26	0	1	0	0	0	1	0	0	8.33264	7.64024	6.64850
Switzerland	2004	48518	162.54	52.60	23.93	5.8211	0.8610	1.68	0	0	1	0	0	0	0	0	8.58419	7.64024	5.12534
Taiwan	2004	3702.9	29.06	46.57	5.3737	25.438	1.6504	1.47	0	0	0	1	0	0	0	0	8.46843	8.91252	5.10354
Thailand	2004	2059.1	23.84	24.17	1.6643	-9.774	1.8448	2.26	0	0	0	1	0	0	1	0	8.46843	8.91252	5.10354
United Kingdom	2004	111392	3531.49	366.75	28.015	32.386	0.7697	0.55	1	0	0	0	0	1	0	0	8.40557	8.91252	5.10354
Venezuela	2004	2443	-298.78	23.89	5.6191	-11.64	0.4323	2.365	0	1	0	0	0	0	0	1	8.18772	8.91252	5.10354
Australia	2005	26643	183.93	101.34	15.666	-12.35	2.0781	1.63	1	0	0	0	0	0	0	0	4.20447	6.53031	7.68147
Belgium	2005	16252	-55.4	42.17	17.934	7.2226	0.8112	0.21	0	0	1	0	0	1	0	0	4.25724	6.53031	7.30245
Brazil	2005	7588.9	327.68	176.69	4.5465	14.147	0.8862	1.155	0	0	0	1	0	0	0	1	4.46618	7.49685	7.30245
Canada	2005	62041	489.41	164.67	15.572	271.08	0.0958	2.05	1	0	1	0	1	0	0	0	4.60507	7.49685	7.29809
China	2005	5099.4	95.48	346.01	2.415	14.067	1.4542	1.26	0	0	0	1	0	0	0	0	4.83898	7.49685	7.29809
Colombia	2005	1929.1	27	25.26	2.163	-183.5	0.4991	1.155	0	1	0	0	0	0	0	1	4.84018	9.25000	7.10354
Costa Rica	2005	-524.7	72.98	2.43	2.2767	-3.576	0.4300	3.47	0	1	0	0	0	0	0	0	4.84018	9.25000	7.10354
Dominican Republic	2005	2.88	16.45	8.13	3.9567	1.9056	0.3097	1.68	0	1	0	0	0	0	0	0	4.28282	9.25000	7.10354
Ecuador	2005	245.01	4.2	5.23	1.5939	2.1218	0.5678	1.68	0	1	0	0	0	0	0	1	4.02289	9.25000	7.10354
Egypt	2005	1899.5	3.26	12.95	0.763	-2.458	1.2200	4.47	0	0	0	1	0	0	0	0	6.60491	5.99139	8.44687
France	2005	10472	-25.85	233.49	14.385	32.19	0.8043	0.42	0	0	1	0	0	1	0	0	6.59102	5.98281	8.32970
Germany	2005	37694	83.6	275.01	18.05	58.016	0.8757	2.05	0	0	0	1	0	1	0	0	7.42451	5.79825	8.44687
Honduras	2005	224.55	-1.63	1.28	0.712	-63.2	0.3826	1.39	0	1	0	0	0	0	0	0	7.64673	5.92781	8.40327
Hong Kong SAR	2005	10554	-0.21	21.51	5.754	5.9298	1.7110	2.1	1	0	0	0	0	0	0	0	7.63620	5.92781	8.40327
India	2005	1112.2	15.3	125.39	3.486	11.78	1.5721	3.05	0	0	0	1	0	0	0	0	7.67298	9.20947	8.40327
Ireland	2005	-2424	143.3	25.82	18.543	19.242	0.7103	0.945	1	0	0	0	0	1	0	0	7.64339	9.20947	8.40327
Israel	2005	3102.9	34.33	15.56	8.2346	-5.869	1.2382	0.84	0	0	0	1	0	0	0	0	7.57155	8.95947	8.40327
Italy	2005	4632.6	193.21	186.88	11.781	17.713	0.9416	2.235	0	0	0	1	0	1	0	0	4.80290	8.16295	7.92204
Japan	2005	25081	9.18	401.04	16.38	113.51	1.4226	1.05	0	0	0	1	0	0	0	0	4.68629	8.16295	7.92204
Korea	2005	5739.9	204.09	130.00	9.282	-65.24	1.4568	1.26	0	0	0	1	0	0	0	0	5.72988	8.36295	7.92204
Malaysia	2005	4058.9	6.35	18.39	3.297	-0.902	2.0011	1.68	0	0	0	1	0	0	1	0	5.89655	8.36295	7.92204
Mexico	2005	23614	1049.63	116.15	2.289	143.5	0.3955	0.47	0	1	0	0	1	0	0	0	5.80704	8.36295	7.92204
Netherlands	2005	66892	1641.27	71.95	16.17	-119.5	0.8077	0.63	0	0	0	1	0	1	0	0	6.07067	9.85723	7.92204
Norway	2005	1825.1	0.84	46.27	24.57	-4.965	0.8132	2.735	0	0	0	1	0	0	0	0	6.07067	9.85723	7.92204
Philippines	2005	1643	42.09	14.48	1.323	3.8971	1.7978	1.47	1	0	0	0	0	0	1	0	5.97807	9.85723	7.92204
Poland	2005	-157.2	-215.13	49.59	4.053	-5.359	0.9364	0.735	0	0	0	1	0	1	0	0	5.80525	9.85723	7.92204
Russia	2005	4553.5	5.08	143.21	4.179	13.767	1.0200	1.575	0	0	0	1	0	0	0	0	5.19206	9.42402	2.78696
Singapore	2005	28140	-3.53	16.99	6.783	3.0178	2.0284	2.1	1	0	1	0	0	0	1	0	5.18592	9.41110	4.16844
South Africa	2005	877.73	-5.07	34.49	7.665	-6.051	1.7025	0.945	1	0	0	0	0	0	0	0	6.40955	9.26038	4.16844
Spain	2005	11954	99.32	141.49	11.708	3.965	0.7939	0.76	0	1	0	0	0	1	0	0	6.46511	9.16414	3.72207
Switzerland	2005	4477.9	39.82	38.62	23.741	6.1943	0.8610	1.68	0	0	1	0	0	0	0	0	6.55501	9.27208	3.99183
Taiwan	2005	3952.1	1.37	44.33	7.455	24.556	1.6504	1.47	0	0	0	1	0	0	0	0	6.67264	9.48931	4.54768
Thailand	2005	4327.8	19.67	22.69	1.701	-7.623	1.8448	0.47	0	0	0	1	0	0	1	0	6.67264	9.50000	3.75204
United Kingdom	2005	90484	945.76	245.56	18.732	35.32	0.7697	0.945	1	0	0	0	0	1	0	0	6.61980	9.50000	3.97003
Venezuela	2005	1737.9	5.22	26.51	2.982	-6.338	0.4323	-0.43	0	1	0	0	0	0	0	1	6.69976	9.50000	3.91826
Australia	2006	7853.5	415.18	85.67	15.666	-18.64	2.0781	2.34	1	0	0	0	0	0	0	0	3.78551	8.05720	4.76180

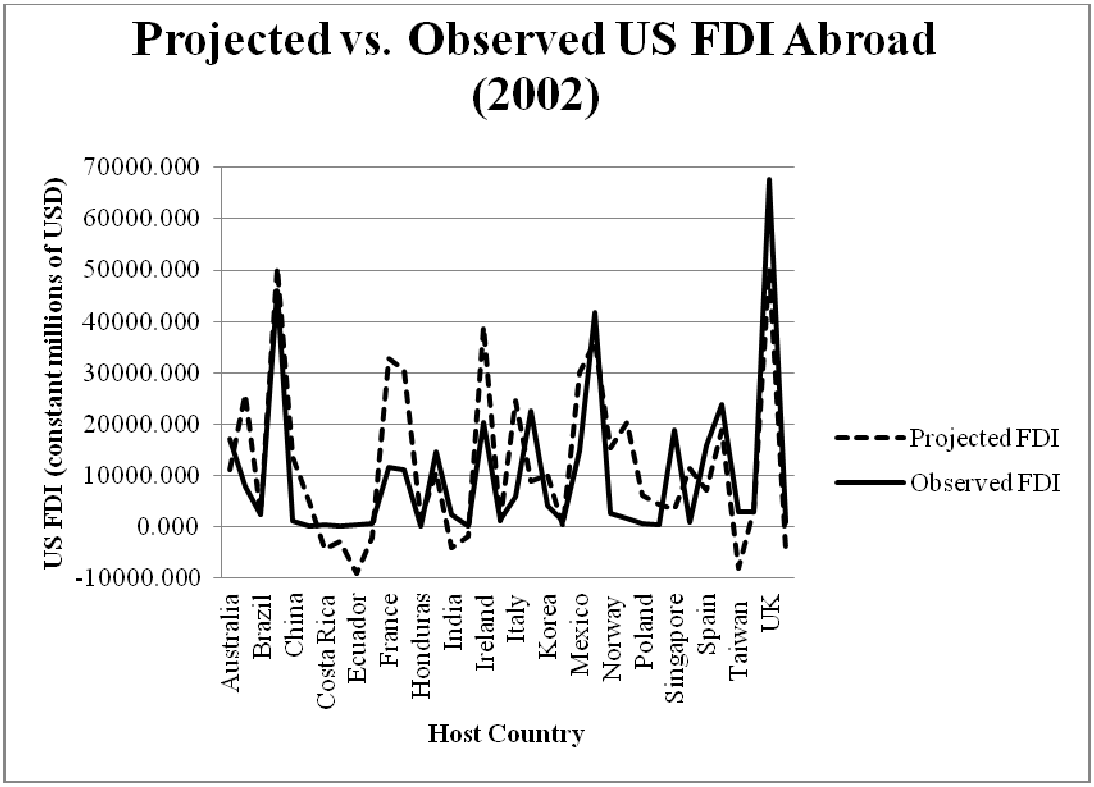
Belgium	2006	12910	106.09	42.92	17.934	7.9243	0.8112	0.21	0	0	1	0	0	1	0	0	3.98274	8.65720	4.76180
Brazil	2006	9107.2	253.99	174.98	4.5465	14.986	0.8862	1.155	0	0	0	1	0	0	0	1	4.84358	9.01028	4.76180
Canada	2006	21984	850.78	167.02	15.572	281.61	0.0958	1.26	1	0	1	0	1	0	0	0	5.01025	9.01028	4.31063
China	2006	11436	83.42	414.42	2.415	48.848	1.4542	1.26	0	0	0	1	0	0	0	0	5.25716	8.81028	4.59946
Colombia	2006	408.32	16.26	19.34	2.163	-218.1	0.4991	0.655	0	1	0	0	0	0	0	1	4.85833	9.25000	5.11172
Costa Rica	2006	842.58	65.22	2.95	2.8891	-3.476	0.4300	1.89	0	1	0	0	0	0	0	0	4.85833	9.25000	5.42779
Dominican Republic	2006	145.15	15.92	3.89	1.7884	1.4955	0.3097	0.18	0	1	0	0	0	0	0	0	4.91488	9.50000	5.48774
Ecuador	2006	160.61	14.2	5.46	1.7015	3.5133	0.5678	1.68	0	1	0	0	0	0	0	1	4.92668	9.25000	5.66757
Egypt	2006	1238.8	5.68	16.21	0.988	-3.208	1.2200	2.1	0	0	0	1	0	0	0	0	6.05598	8.01158	9.20981
France	2006	15192	692.5	240.91	14.385	35.147	0.8043	0.42	0	0	1	0	0	1	0	0	5.72521	8.01158	9.18148
Germany	2006	14246	220.64	300.87	18.05	59.821	0.8757	1.26	0	0	0	1	0	1	0	0	5.71618	8.01158	9.18148
Honduras	2006	215.41	3.16	1.39	0.7987	-66.66	0.3826	1.785	0	1	0	0	0	0	0	0	5.66062	7.89323	9.12807
Hong Kong SAR	2006	10868	4.79	21.03	5.754	5.0099	1.7110	2.1	1	0	0	0	0	0	0	0	5.70556	7.96637	9.24523
India	2006	4088	19.19	117.41	3.486	15.553	1.5721	1.47	0	0	0	1	0	0	0	0	5.95203	8.75463	9.28883
Indonesia	2006	2687.6	-10.54	62.63	1.323	-3.822	2.1342	1.26	0	0	0	1	0	0	1	0	5.95203	8.90239	9.29428
Ireland	2006	42785	40.66	27.18	18.543	17.92	0.7103	0.945	1	0	0	0	0	1	0	0	5.85982	8.89269	9.66778
Israel	2006	2865.4	32.32	17.00	8.2346	-3.369	1.2382	0.84	0	0	0	1	0	0	0	0	5.92643	8.90715	9.66778
Italy	2006	6057.9	129.46	192.36	11.781	17.513	0.9416	1.55	0	0	0	1	0	1	0	0	4.19726	7.14942	4.49909
Japan	2006	20300	13.73	293.68	16.38	122.38	1.4226	1.05	0	0	0	1	0	0	0	0	4.26961	7.86371	4.30080
Korea	2006	11689	295.62	123.96	9.282	-71.26	1.4568	1.26	0	0	0	1	0	0	0	0	6.39914	8.07116	5.04360
Malaysia	2006	2418.4	12.14	21.01	3.297	0.3483	2.0011	1.68	0	0	0	1	0	0	1	0	6.56580	7.96813	4.94823
Mexico	2006	24752	405.9	122.47	2.289	169.39	0.3955	1.26	0	1	0	0	1	0	0	0	6.38948	7.95700	4.94823
Norway	2006	2925.9	-0.16	42.60	24.57	-6.615	0.8132	1.155	0	0	0	1	0	0	0	0	6.56395	8.78525	4.96458
Philippines	2006	1795.6	51.24	18.10	1.323	4.0969	1.7978	1.47	1	0	0	0	0	0	1	0	6.60947	9.01279	5.28065
Poland	2006	2529.8	345.57	44.22	4.053	-5.406	0.9364	0.735	0	0	0	1	0	1	0	0	6.51661	8.74755	5.23978
Russia	2006	3974.2	208.8	175.39	4.179	18.049	1.0200	1.575	0	0	0	1	0	0	0	0	4.49601	4.27692	6.56271
Singapore	2006	21531	-3.58	20.37	6.783	2.1037	2.0284	2.1	1	0	1	0	0	0	1	0	4.46934	5.06253	6.27911
South Africa	2006	844.49	-8.59	27.91	7.665	-6.536	1.7025	0.945	1	0	0	0	0	0	0	0	5.88178	6.83683	6.27911
Spain	2006	9700.4	105.07	146.81	11.708	3.8527	0.7939	1.155	0	1	0	0	0	1	0	0	6.07622	6.63683	5.93188
Switzerland	2006	22475	38.92	40.78	23.741	6.505	0.8610	1.68	0	0	1	0	0	0	0	0	5.91767	7.03683	6.73297
Taiwan	2006	5657.8	22.38	36.58	7.455	26.97	1.6504	1.47	0	0	0	1	0	0	0	0	5.98226	8.00000	7.04905
Thailand	2006	2542.9	126.61	29.99	1.701	-7.721	1.8448	2.26	0	0	0	1	0	0	1	0	5.98226	8.25000	7.07902
United Kingdom	2006	128663	1589.71	274.30	18.732	35.765	0.7697	0.945	1	0	0	0	0	1	0	0	6.22373	8.00000	6.20436
Venezuela	2006	3864.1	78.7	31.34	2.982	-5.141	0.4323	1.655	0	1	0	0	0	0	0	1	6.07426	7.50000	6.36240
Australia	2007	30902	446.3	152.96	11.066	-20.72	2.0781	1.155	1	0	0	0	0	0	0	0	5.52194	8.26712	9.23181
Belgium	2007	21520	392.27	65.09	16.384	8.4753	0.8112	0.21	0	0	1	0	0	1	0	0	5.55169	8.26712	8.80061
Brazil	2007	22339	-47.66	236.57	6.0965	13.572	0.8862	1.155	0	0	0	1	0	0	0	1	7.54931	8.26712	8.80061
Canada	2007	88586	2024.58	187.03	6.3215	296.8	0.0958	0.26	1	0	1	0	1	0	0	0	7.54931	8.26712	8.61580
China	2007	8807.4	227.21	622.77	6.015	70.968	1.4542	1.26	0	0	0	1	0	0	0	0	7.68470	8.26712	8.73025
Colombia	2007	1550.8	91	38.61	7.063	-244.5	0.4991	1.55	0	1	0	0	0	0	0	1	7.65347	9.75000	9.17166
Costa Rica	2007	604.05	-1.11	3.88	3.6154	-3.511	0.4300	1.89	0	1	0	0	0	0	0	0	7.65347	9.75000	9.17166
Dominican Republic	2007	88.69	18.97	5.82	2.5751	1.1018	0.3097	1.365	0	1	0	0	0	0	0	0	7.69134	9.75000	9.23978
Ecuador	2007	292.84	4.3	5.65	1.6401	2.8046	0.5678	1.68	0	1	0	0	0	0	0	1	7.73805	9.75000	10.00000
Egypt	2007	2627.4	-5.48	20.85	7.4415	-2.47	1.2200	2.1	0	0	0	1	0	0	0	0	5.47105	8.41538	8.62478
France	2007	24403	4517.8	364.08	14.685	39.675	0.8043	3.92	0	0	1	0	0	1	0	0	5.44427	8.54605	8.92011
Germany	2007	26641	124.81	469.26	12.15	61.337	0.8757	0.26	0	0	0	1	0	1	0	0	5.98473	8.71485	8.92011
Honduras	2007	-56.56	-1	1.70	0.919	-70.48	0.3826	1.785	0	1	0	0	0	0	0	0	6.04029	8.56816	8.80381
Hong Kong SAR	2007	9407.6	3.84	25.66	12.054	3.9354	1.7110	2.1	1	0	0	0	0	0	0	0	6.05348	8.63196	8.72207
India	2007	6922.7	15.5	200.28	1.886	18.523	1.5721	2.47	0	0	0	1	0	0	0	0	6.06293	9.46657	8.68937
Indonesia	2007	7485.6	-12.9	65.93	0.823	-4.717	2.1342	1.26	0	0	0	1	0	0	1	0	6.06293	9.50000	8.58311
Ireland	2007	49474	26.35	38.00	14.343	19.147	0.7103	0.945	1	0	0	0	0	1	0	0	6.09777	9.50000	8.62350
Israel	2007	2244.3	39.05	23.71	8.7222	-3.257	1.2382	0.84	0	0	0	1	0	0	0	0	6.08835	9.43575	8.45777
Italy	2007	8122.4	195.22	292.87	19.381	18.6	0.9416	0.155	0	0	0	1	0	1	0	0	3.91726	8.80570	5.76175
Japan	2007	18526	113.22	408.24	12.38	117.79	1.4226	1.05	0	0	0	1	0	0	0	0	5.04246	8.84724	5.76175
Korea	2007	1991.8	302.27	134.05	-4.618	-67.35	1.4568	1.26	0	0	0	1	0	0	0	0	5.14030	8.62366	5.88011
Malaysia	2007	3303.9	6.19	28.75	1.897	-4.946	2.0011	1.68	0	0	0	1	0	0	1	0	5.19585	8.62366	6.09264
Mexico	2007	25504	773.1	127.37	-0.811	184.94	0.3955	1.26	0	1	0	0	1	0	0	0	5.42968	8.59803	6.09264
Philippines	2007	1464.1	65.65	24.21	1.223	3.6272	1.7978	1.47	1	0	0	0	0	0	1	0	5.29520	9.50000	5.77929
Poland	2007	10136	401.57	71.38	6.153	-5.206	0.9364	1.235	0	0	0	1	0	1	0	0	5.13828	9.25144	5.51771
Singapore	2007	28845	2.58	28.65	1.283	3.1354	2.0284	2.1	1	0	1	0	0	0	1	0	5.72106	8.82731	6.11172
South Africa	2007	2095.8	0.68	35.77	-3.135	-5.477	1.7025	1.945	1	0	0	0	0	0	0	0	7.52136	9.02703	6.53951
Spain	2007	22102	268.13	213.05	11.108	3.3454	0.7939	0.655	0	1	0	0	0	1	0	0	7.57691	8.97826	6.53951

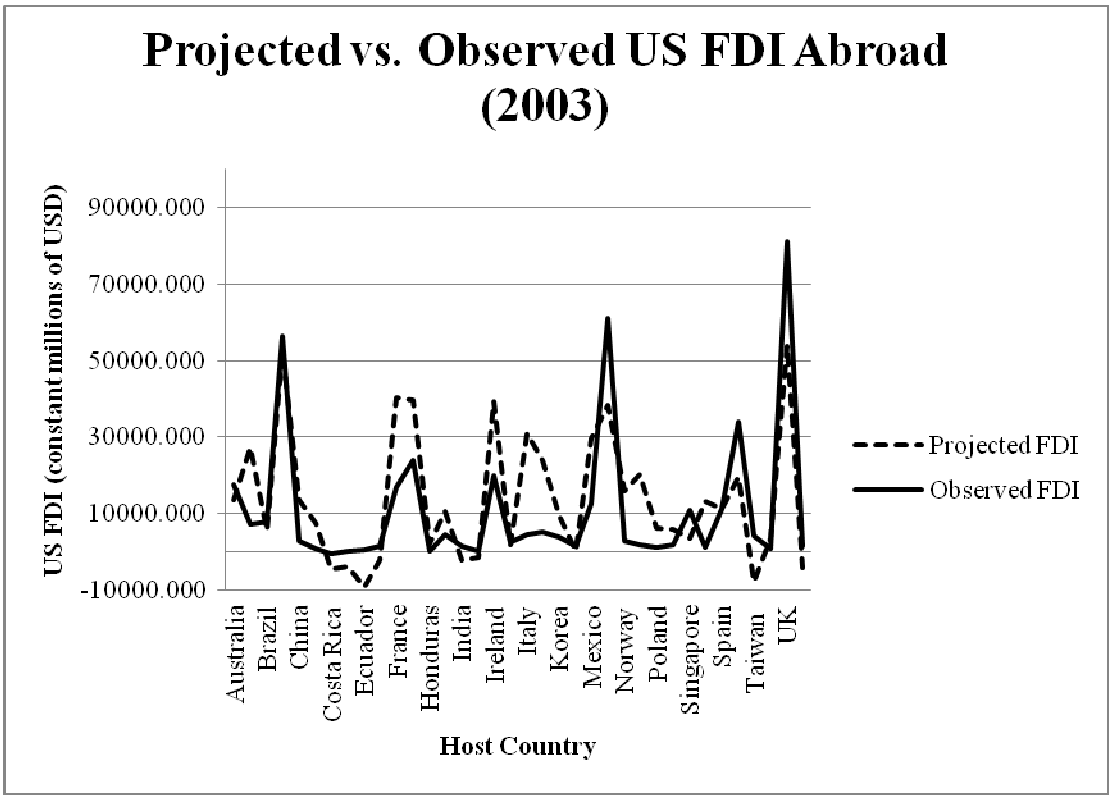
Switzerland	2007	14078	21.39	56.45	24.341	6.4667	0.8610	1.68	0	0	1	0	0	0	0	0	7.52031	8.96968	6.53951
Taiwan	2007	2377.8	18.64	42.60	1.455	26.617	1.6504	0.47	0	0	0	1	0	0	0	0	7.60596	8.96882	6.41689
Thailand	2007	1876.8	-8.61	38.10	4.401	-7.485	1.8448	1.47	0	0	0	1	0	0	1	0	7.60596	9.00000	6.74067
United Kingdom	2007	105334	2151.34	399.09	-1.468	38.881	0.7697	0.945	1	0	0	0	0	1	0	0	7.85577	9.00000	6.44959
Venezuela	2007	4242.6	330.14	37.39	8.882	-5.008	0.4323	1.26	0	1	0	0	0	0	0	1	7.87568	9.00000	6.44959
Australia	2008	26047	1180.37	122.60	14.7	-20.94	2.0781	1.155	1	0	0	0	0	0	0	0	4.50959	6.68046	9.20981
Belgium	2008	15911	512.99	57.11	17.609	8.9429	0.8112	0.21	0	0	1	0	0	1	0	0	4.90575	6.68046	9.01362
Brazil	2008	5395.5	541.21	232.55	4.872	16.78	0.8862	2.155	0	0	0	1	0	0	0	1	4.46062	6.68046	9.07629
Canada	2008	48476	987.53	145.89	13.629	315.43	0.0958	1.05	1	0	1	0	1	0	0	0	4.40507	6.68046	9.07629
China	2008	30456	2223.24	736.87	3.171	69.574	1.4542	1.26	0	0	0	1	0	0	0	0	4.39626	6.68046	9.07629
Colombia	2008	1431.9	13.7	27.73	3.192	-253.7	0.4991	1.155	0	1	0	0	0	0	0	1	4.34096	9.00000	9.07629
Costa Rica	2008	623.07	-39.56	3.64	3.9623	-6.406	0.4300	0.89	0	1	0	0	0	0	0	0	4.34096	9.00000	9.07629
Ecuador	2008	302.47	18.88	7.48	2.5814	5.9059	0.5678	1.68	0	1	0	0	0	0	0	1	4.35876	9.00000	9.07629
Egypt	2008	2255.8	23.84	24.68	2.121	-4.778	1.2200	2.1	0	0	0	1	0	0	0	0	6.30133	7.04200	9.60223
France	2008	25808	1002.45	316.24	14.448	42.177	0.8043	0.655	0	0	1	0	0	1	0	0	6.55358	7.01852	9.34670
Germany	2008	28358	261.46	399.41	16.811	62.698	0.8757	1.05	0	0	0	1	0	1	0	0	7.17120	7.00296	9.34670
Honduras	2008	314.46	9.79	1.63	1.0428	-72.98	0.3826	1.285	0	1	0	0	0	0	0	0	7.14342	7.20711	9.50136
Hong Kong SAR	2008	7873.2	12.47	19.78	7.077	3.2908	1.7110	2.1	1	0	0	0	0	0	0	0	7.20071	7.20711	9.10627
India	2008	6802.6	-56.45	133.99	3.15	20.583	1.5721	1.68	0	0	0	1	0	0	0	0	7.09390	9.00000	8.78747
Indonesia	2008	4440.4	5.95	69.36	1.218	-4.507	2.1342	1.26	0	0	0	1	0	0	1	0	7.09390	9.00000	9.60490
Ireland	2008	57142	93.52	22.21	17.661	18.865	0.7103	0.945	1	0	0	0	0	1	0	0	7.26621	9.00000	9.43597
Israel	2008	1949.3	43.62	28.64	8.337	-2.428	1.2382	1.84	0	0	0	1	0	0	0	0	7.27701	9.00000	9.32698
Italy	2008	5372.4	98.73	249.44	13.377	18.49	0.9416	0.945	0	0	0	1	0	1	0	0	6.92479	9.19064	6.30699
Japan	2008	32476	26.97	566.88	15.54	110.72	1.4226	1.05	0	0	0	1	0	0	0	0	7.08220	9.19064	6.30699
Korea	2008	3815.2	57.04	27.53	6.363	-61.95	1.4568	1.26	0	0	0	1	0	0	0	0	8.36563	8.95477	6.30699
Malaysia	2008	2652.4	229.77	30.72	3.003	-7.238	2.0011	1.68	0	0	0	1	0	0	1	0	8.47674	8.74465	6.16349
Mexico	2008	15517	257.35	106.78	1.638	191.66	0.3955	1.26	0	1	0	0	1	0	0	0	8.45127	8.78266	6.24251
Philippines	2008	12.13	-83.84	22.58	1.302	2.9344	1.7978	1.47	1	0	0	0	0	0	1	0	7.92901	9.32155	6.41417
Poland	2008	153.94	399.1	80.24	4.494	-4.297	0.9364	2.34	0	0	0	1	0	1	0	0	7.98405	8.96200	6.28065
Singapore	2008	9281.1	0.21	19.20	5.628	-5.274	2.0284	2.1	1	0	1	0	0	0	1	0	3.78223	7.76219	7.74053
South Africa	2008	859.4	14.47	17.46	5.397	-2.601	1.7025	0.155	1	0	0	0	0	0	0	0	2.33889	7.82397	7.74053
Spain	2008	5930.5	277.05	183.27	11.582	3.235	0.7939	2.05	0	1	0	0	0	1	0	0	3.14000	6.55838	6.51226
Switzerland	2008	58429	32.87	65.01	23.867	9.0177	0.8610	1.68	0	0	1	0	0	0	0	0	3.21406	7.96365	6.05450
Taiwan	2008	5565.5	14.85	33.63	6.195	22.278	1.6504	0.26	0	0	0	1	0	0	0	0	3.05697	9.00000	5.77384
Thailand	2008	1037.6	48.57	30.75	2.268	-5.159	1.8448	1.47	0	0	0	1	0	0	1	0	3.05697	9.00000	5.77384
United Kingdom	2008	111590	838.14	156.93	14.49	39.992	0.7697	-0.06	1	0	0	0	0	1	0	0	2.99373	9.00000	5.77384
Venezuela	2008	3376.9	383.56	55.93	4.221	5.1396	0.4323	3.26	0	1	0	0	0	0	0	1	3.13739	8.25000	5.77384

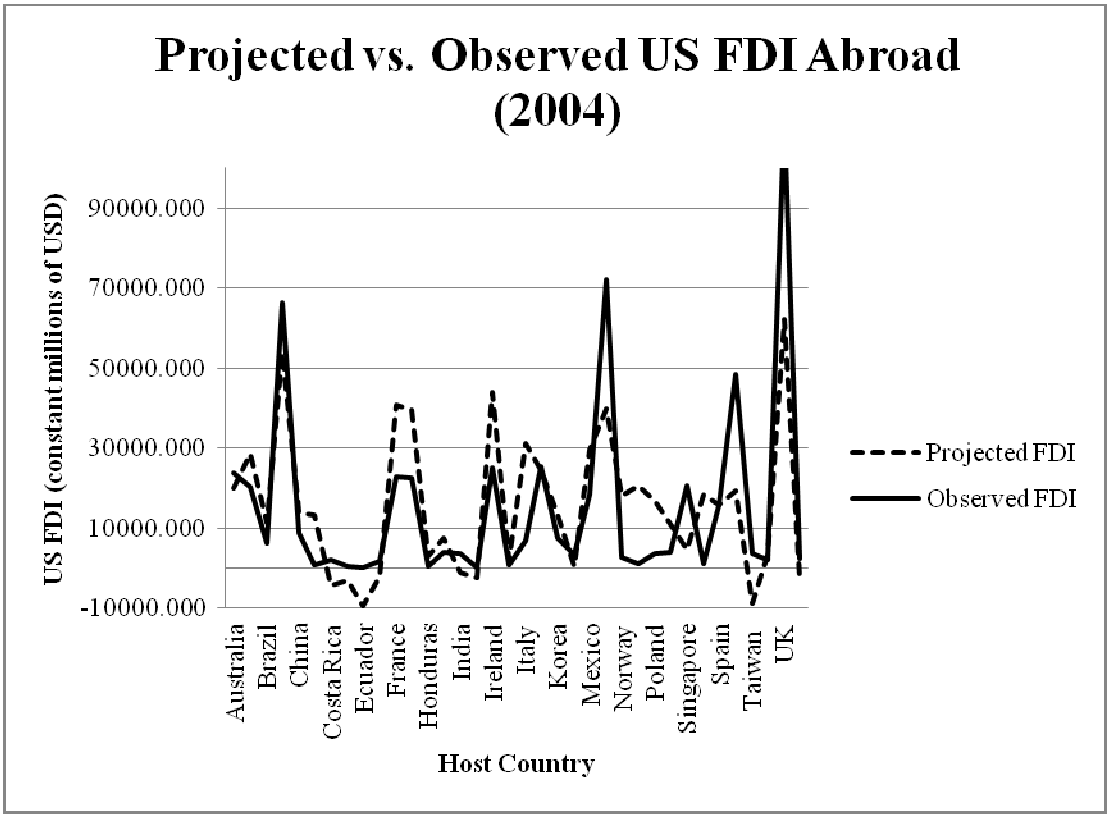
APPENDIX 2

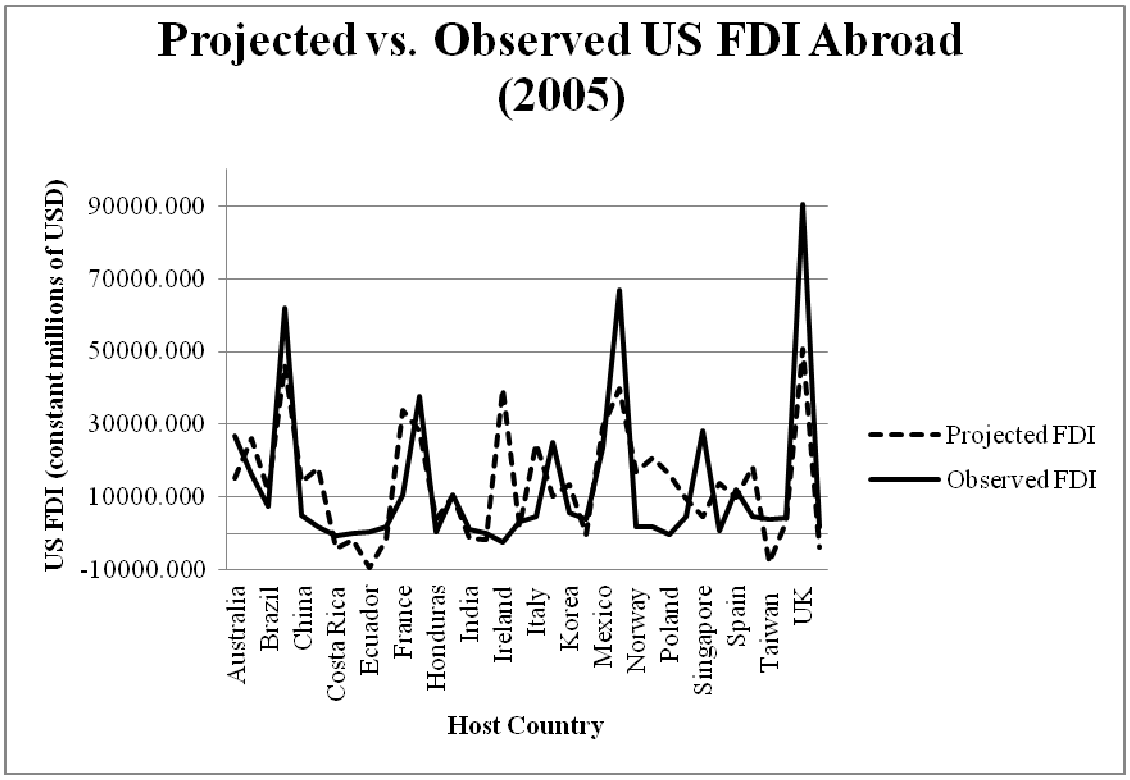
Predictions vs. Observations Graphs of US FDI for 35 Countries, 2001 - 2008

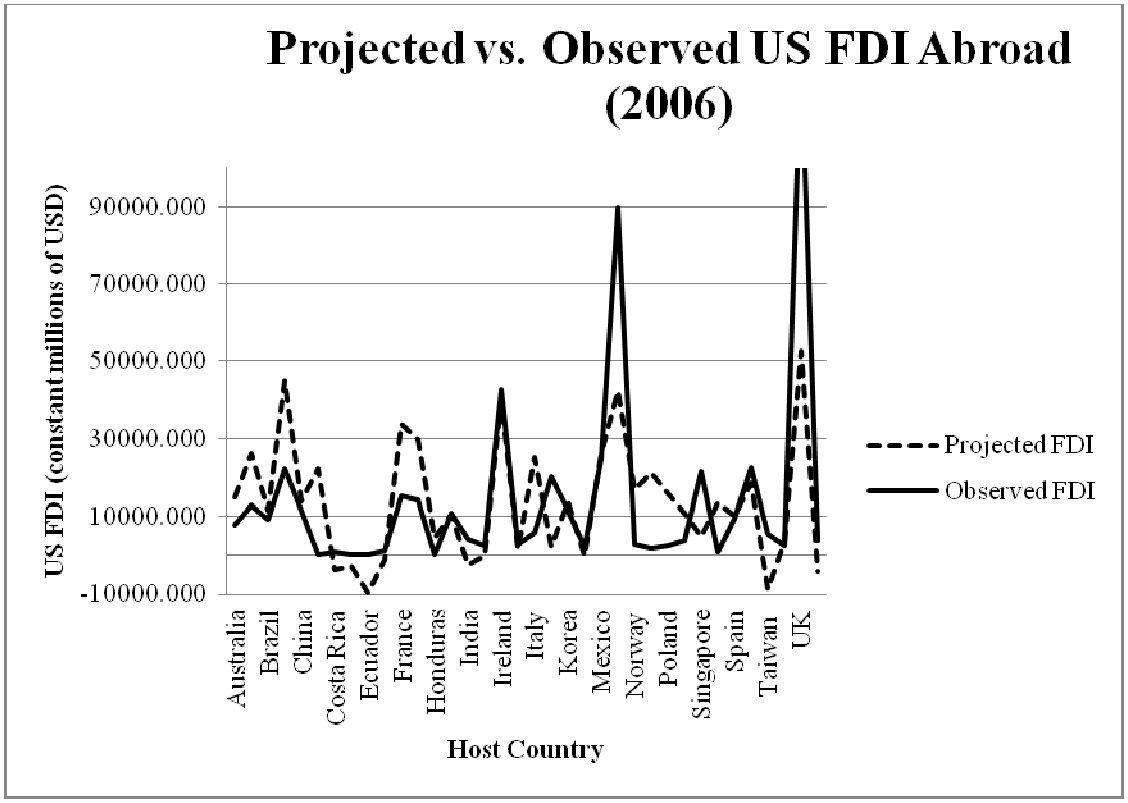

Projected vs. Observed US FDI Abroad (2001)
US FDI (constant millions of USD)
60000.000
50000.000
40000.000
30000.000
20000.000
10000.000
0.000
-10000.000
Australia
Brazil
China
Costa Rica
Ecuador
France
Honduras
India
Ireland
Italy
Korea
Mexico
Norway
Poland
Singapore
Spain
Taiwan
UK
Host Country
Projected FDI
Observed FDI

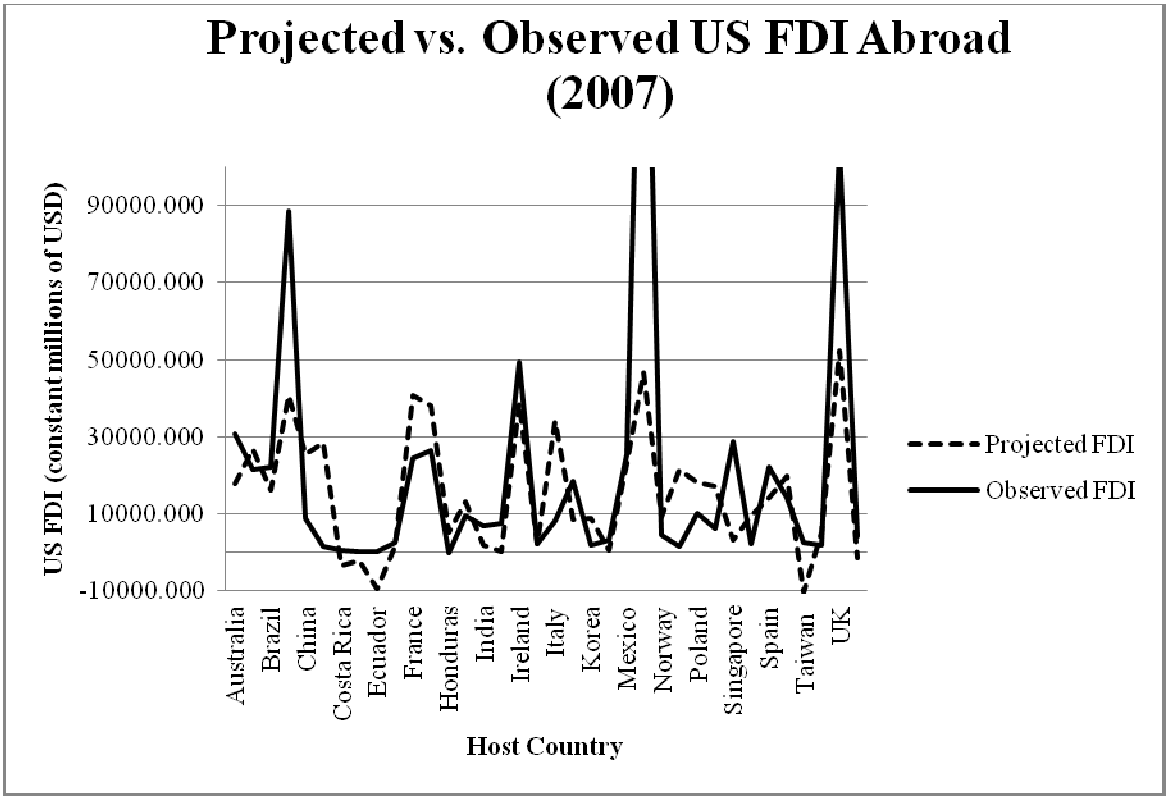

Projected vs. Observed US FDI Abroad (2002)
US FDI (constant millions of USD)
70000.000
60000.000
50000.000
40000.000
30000.000
20000.000
10000.000
0.000
-10000.000
Australia
Brazil
China
Costa Rica
Ecuador
France
Honduras
India
Ireland
Italy
Korea
Mexico
Norway
Poland
Singapore
Spain
Taiwan
UK
Host Country
Projected FDI
Observed FDI

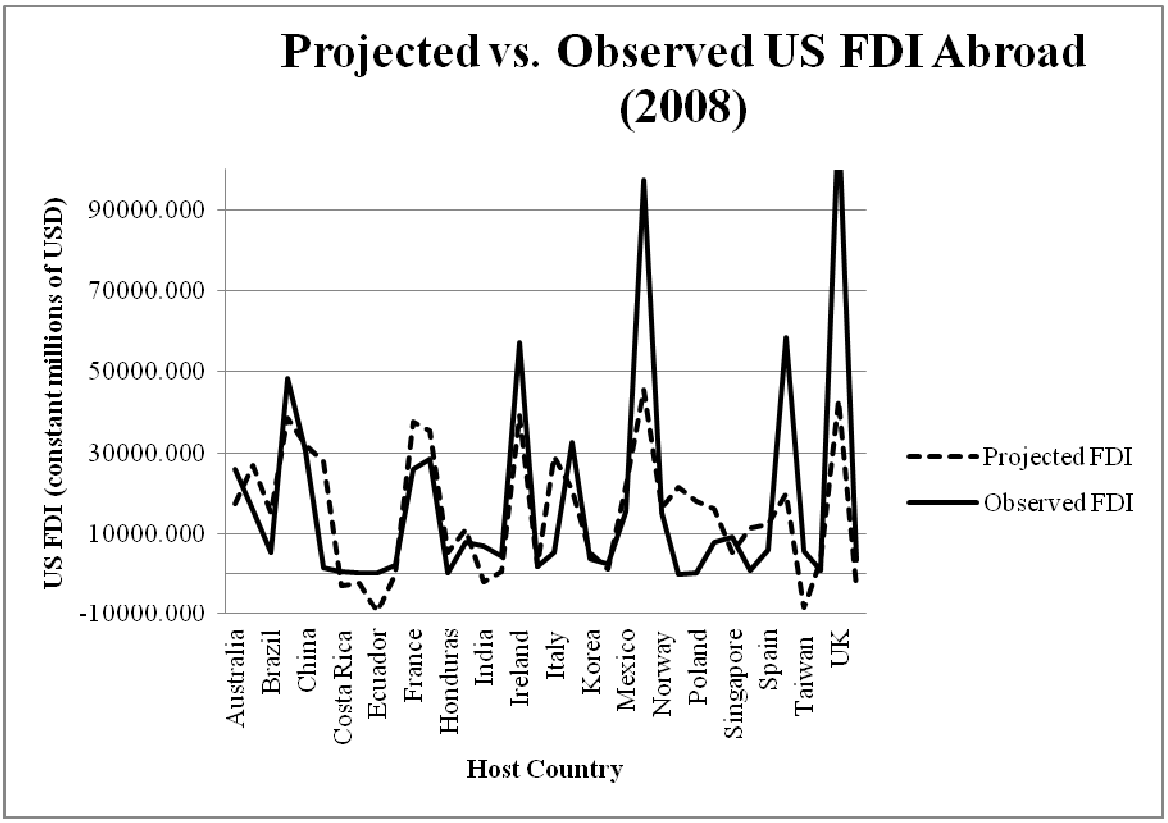

Projected vs. Observed US FDI Abroad (2003)
US FDI (constant millions of USD)
90000.000
70000.000
50000.000
30000.000
10000.000
-10000.000
Australia
Brazil
China
Costa Rica
Ecuador
France
Honduras
India
Ireland
Italy
Korea
Mexico
Norway
Poland
Singapore
Spain
Taiwan
UK
Host Country
Projected FDI
Observed FDI

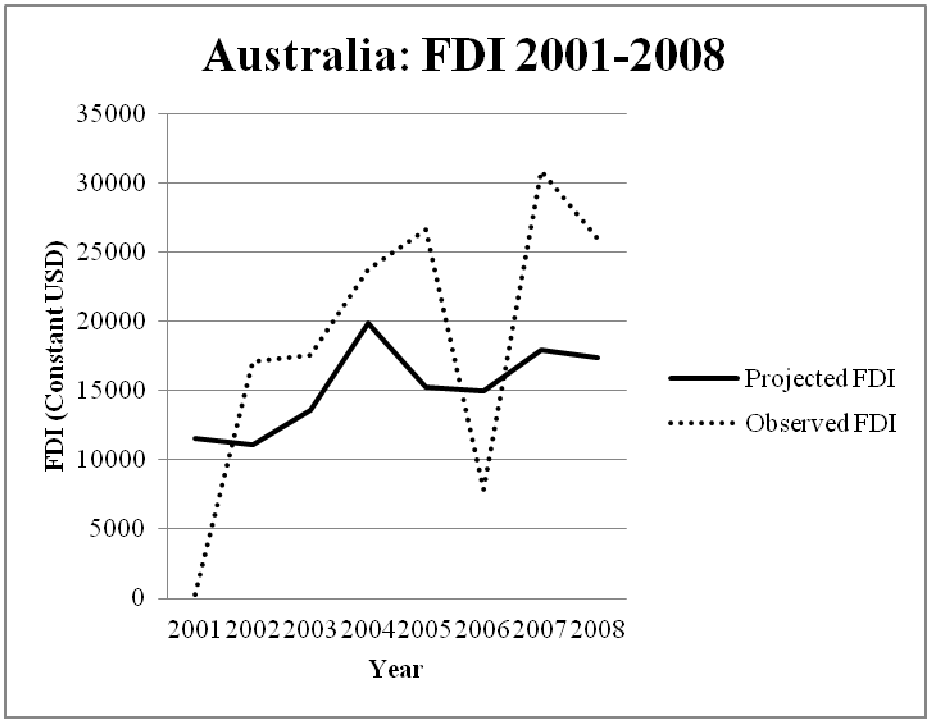

Projected vs. Observed US FDI Abroad (2004)
US FDI (constant millions of USD)
90000.000
70000.000
50000.000
30000.000
10000.000
-10000.000
Australia
Brazil
China
Costa Rica
Ecuador
France
Honduras
India
Ireland
Italy
Korea
Mexico
Norway
Poland
Singapore
Spain
Taiwan
UK
Host Country
Projected FDI
Observed FDI

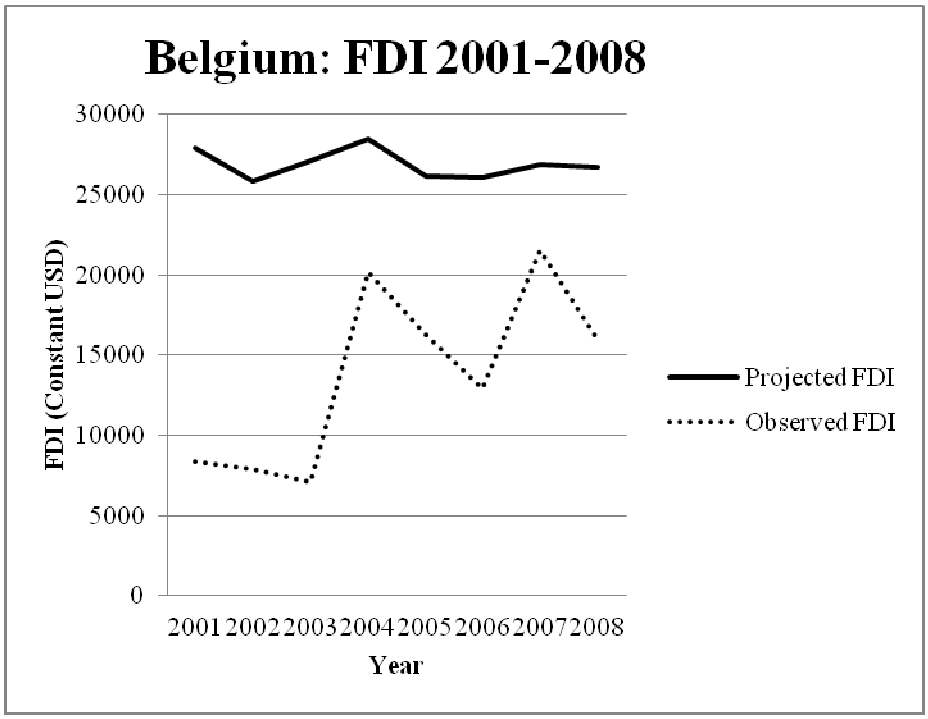

Projected vs. Observed US FDI Abroad (2005)
US FDI (constant millions of USD)
90000.000
70000.000
50000.000
30000.000
10000.000
-10000.000
Australia
Brazil
China
Costa Rica
Ecuador
France
Honduras
India
Ireland
Italy
Korea
Mexico
Norway
Poland
Singapore
Spain
Taiwan
UK
Host Country
Projected FDI
Observed FDI

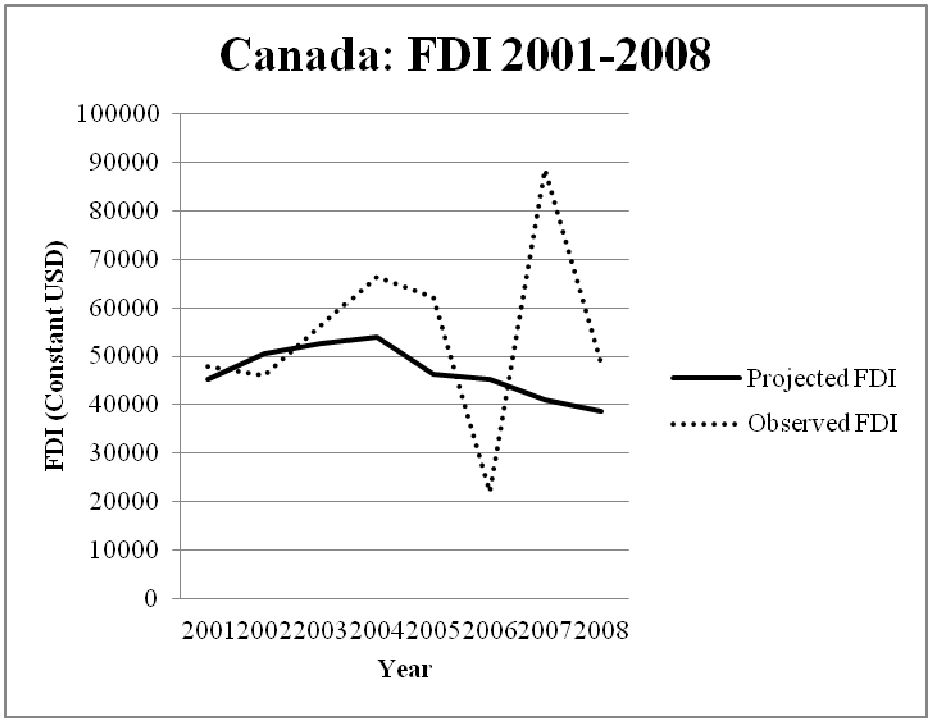

Projected vs. Observed US FDI Abroad (2006)
US FDI (constant millions of USD)
90000.000
70000.000
50000.000
30000.000
10000.000
-10000.000
Australia
Brazil
China
Costa Rica
Ecuador
France
Honduras
India
Ireland
Italy
Korea
Mexico
Norway
Poland
Singapore
Spain
Taiwan
UK
Host Country
Projected FDI
Observed FDI

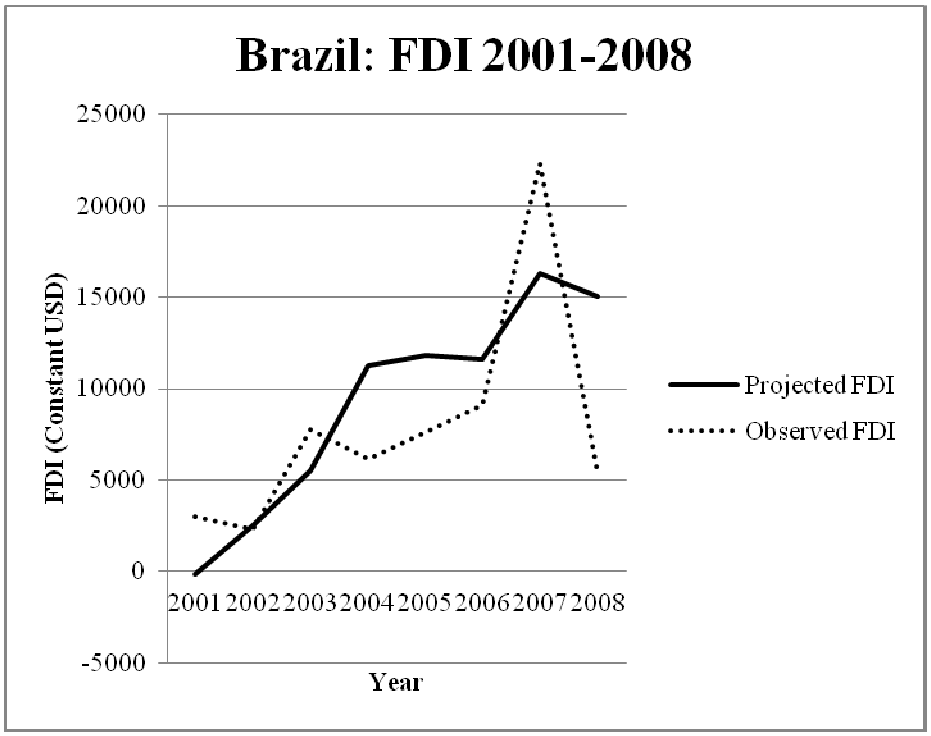

Projected vs. Observed US FDI Abroad (2007)
US FDI (constant millions of USD)
90000.000
70000.000
50000.000
30000.000
10000.000
-10000.000
Australia
Brazil
China
Costa Rica
Ecuador
France
Honduras
India
Ireland
Italy
Korea
Mexico
Norway
Poland
Singapore
Spain
Taiwan
UK
Host Country
Projected FDI
Observed FDI

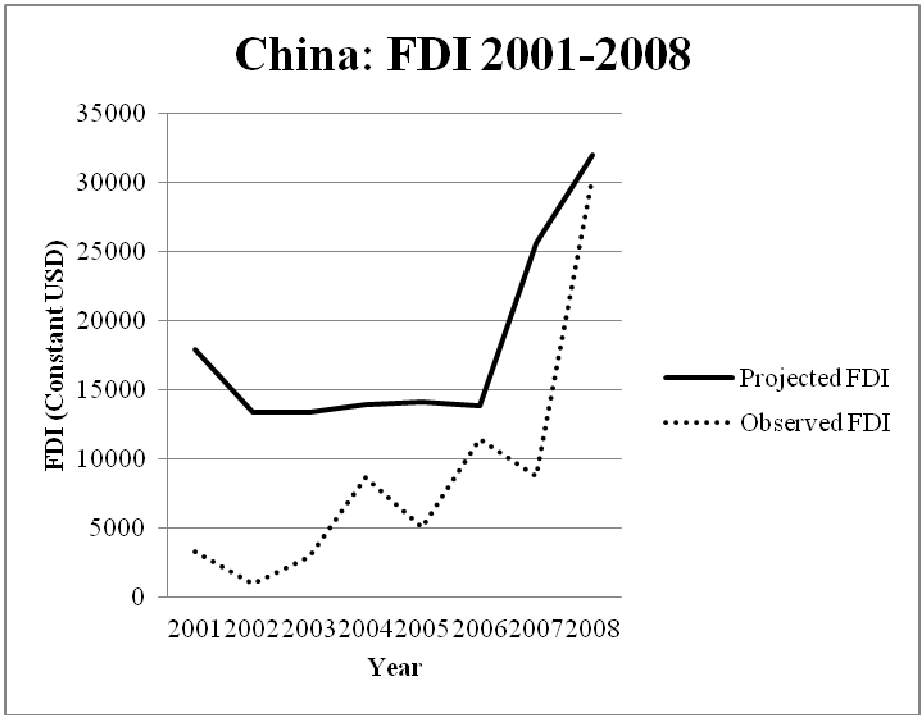

Projected vs. Observed US FDI Abroad (2008)
US FDI (constant millions of USD)
90000.000
70000.000
50000.000
30000.000
10000.000
-10000.000
Australia
Brazil
China
Costa Rica
Ecuador
France
Honduras
India
Ireland
Italy
Korea
Mexico
Norway
Poland
Singapore
Spain
Taiwan
UK
Host Country
Projected FDI
Observed FDI

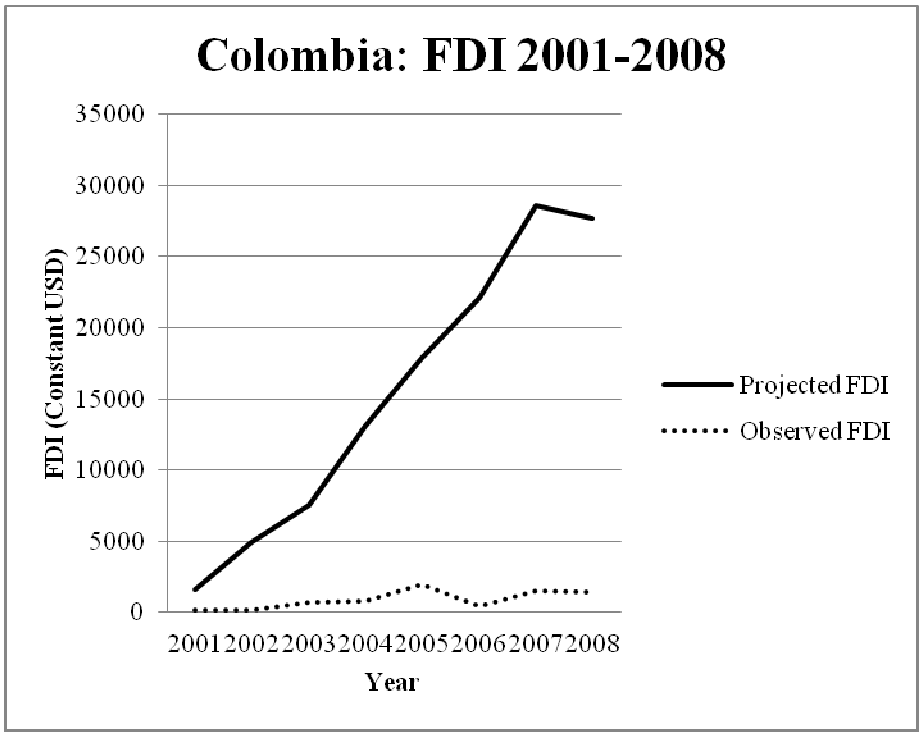

Australia: FDI 2001-2008
FDI (Constant USD)
35000
30000
25000
20000
15000
10000
5000
0
2001
2002
2003
2004
2005
2006
2007
2008
Year
Projected FDI
Observed FDI

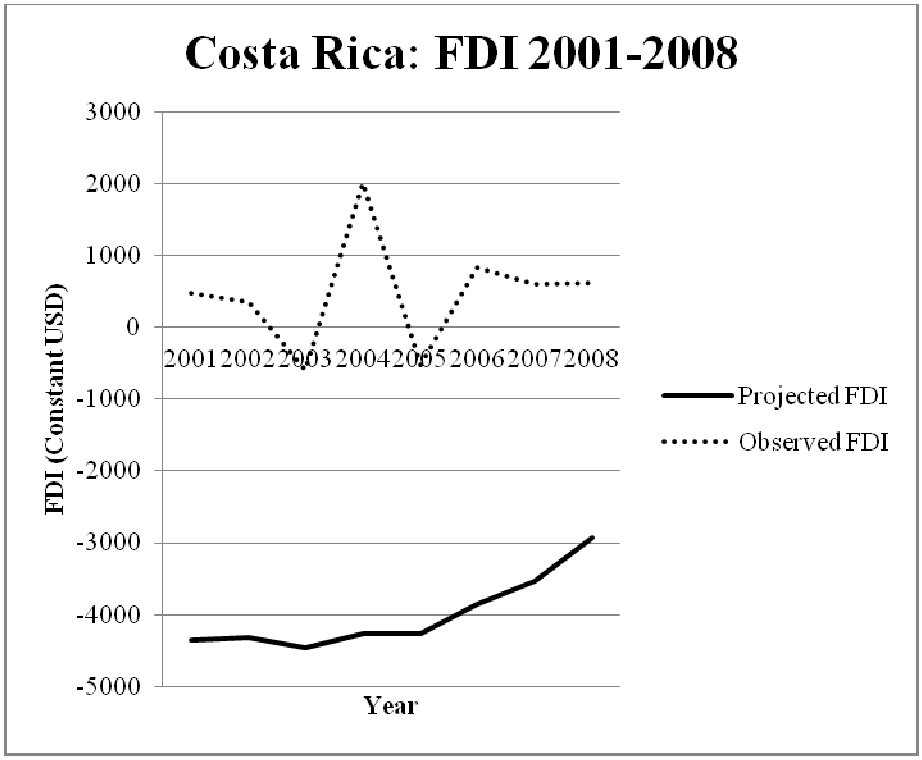

Belgium: FDI 2001-2008
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

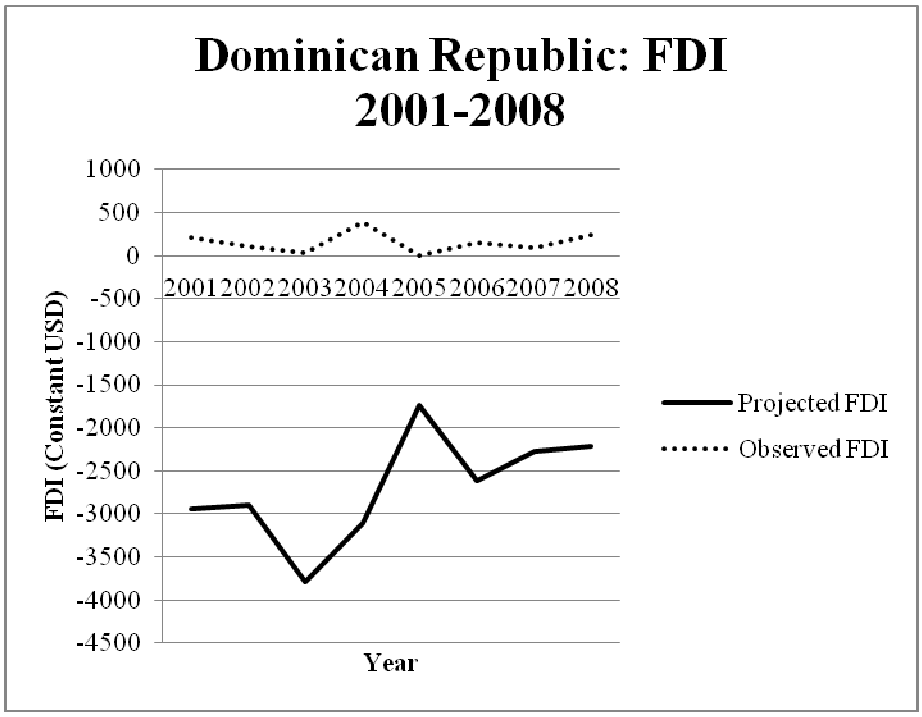

Canada: FDI 2001-2008
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

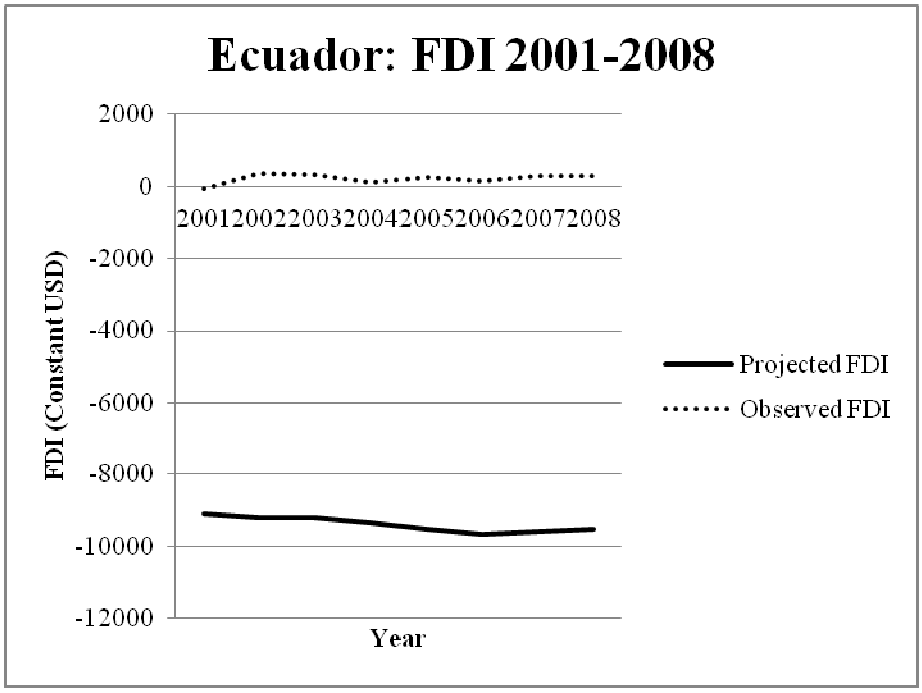

Brazil: FDI 2001-2008
25000
20000
15000
10000
5000
0
-5000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

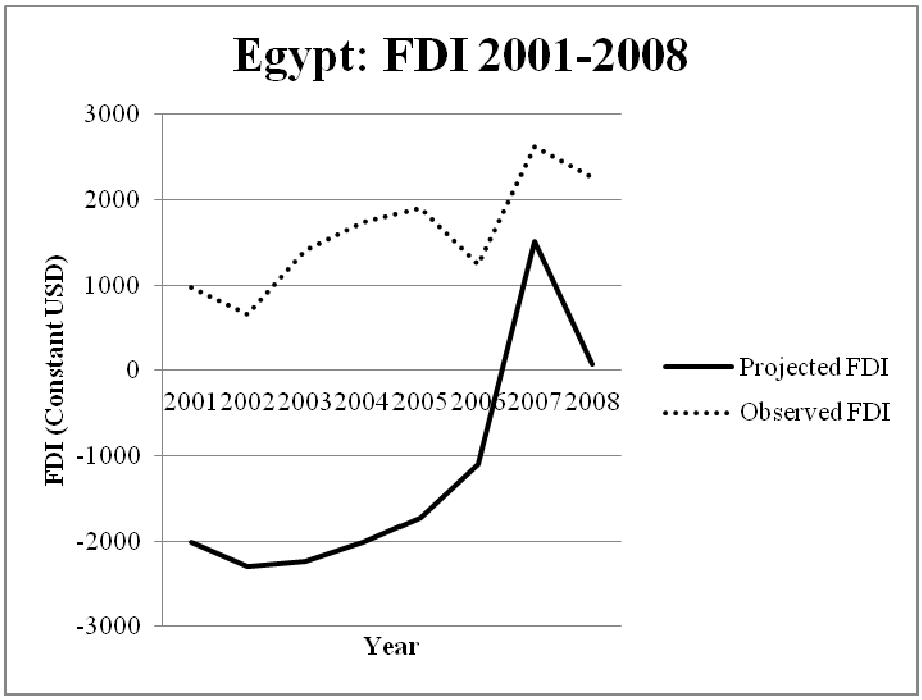

China: FDI 2001-2008
35000
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

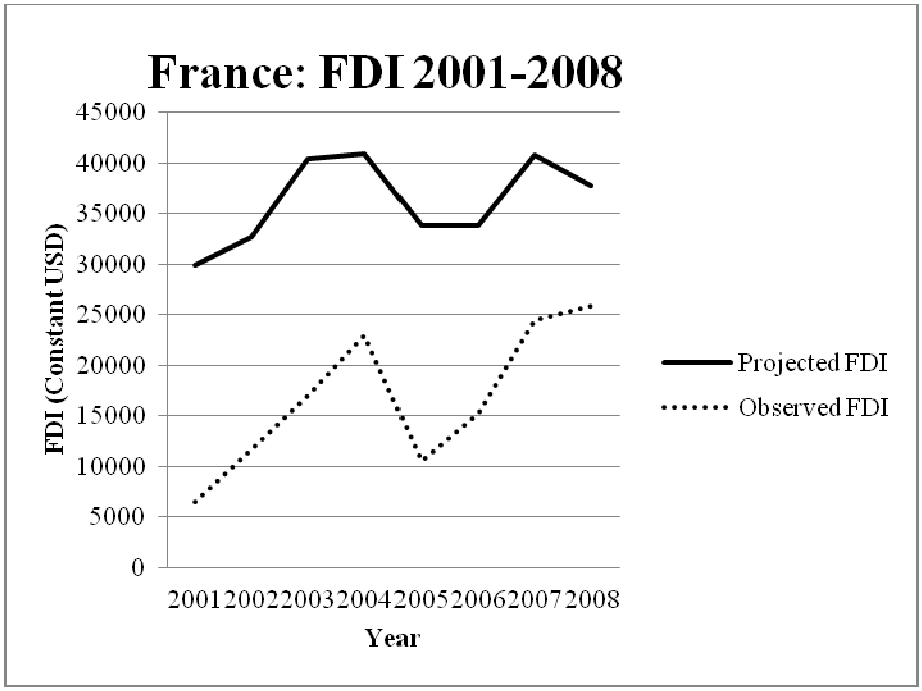

Colombia: FDI 2001-2008
35000
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

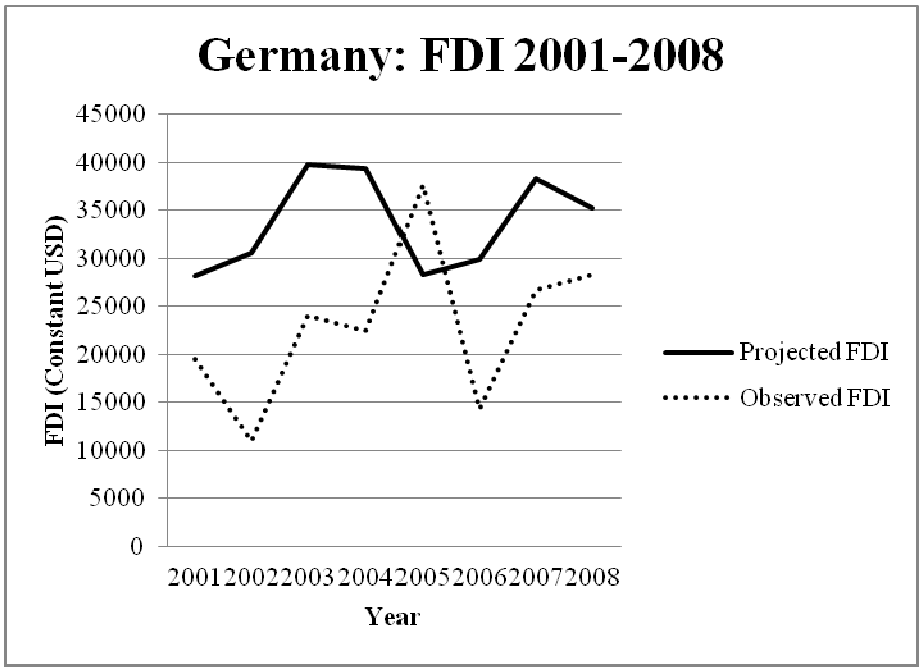

Costa Rica: FDI 2001-2008
3000
2000
1000
0
-1000
-2000
-3000
-4000
-5000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

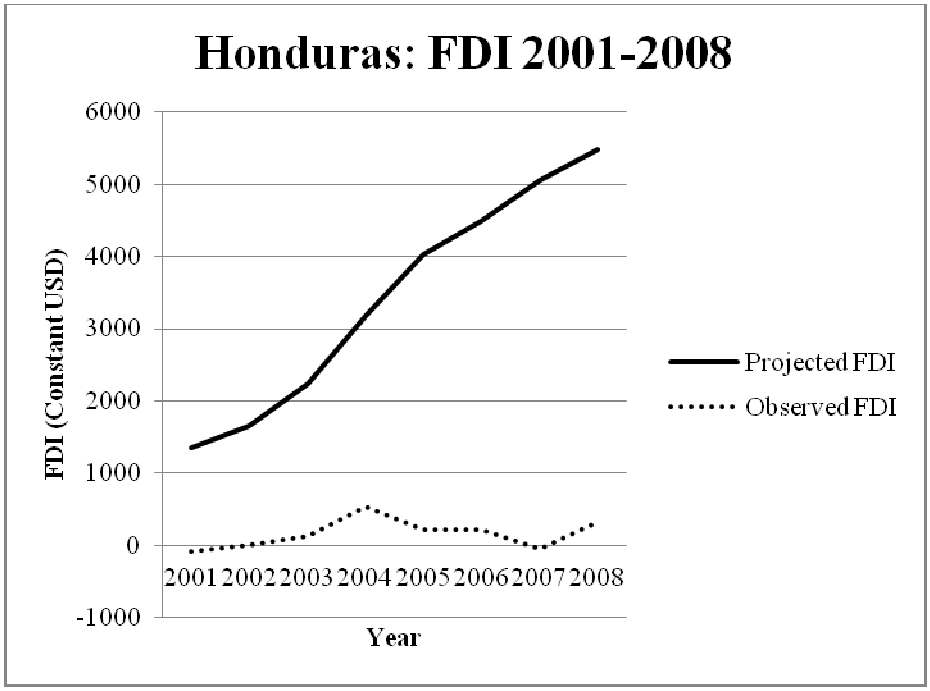

Dominican Republic: FDI 2001-2008
1000
500
0
-500
-1000
-1500
-2000
-2500
-3000
-3500
-4000
-4500
2001 2002 2003 2004 2005 2006 2007 2008
FDI (Constant USD)
Year
Projected FDI
Observed FDI

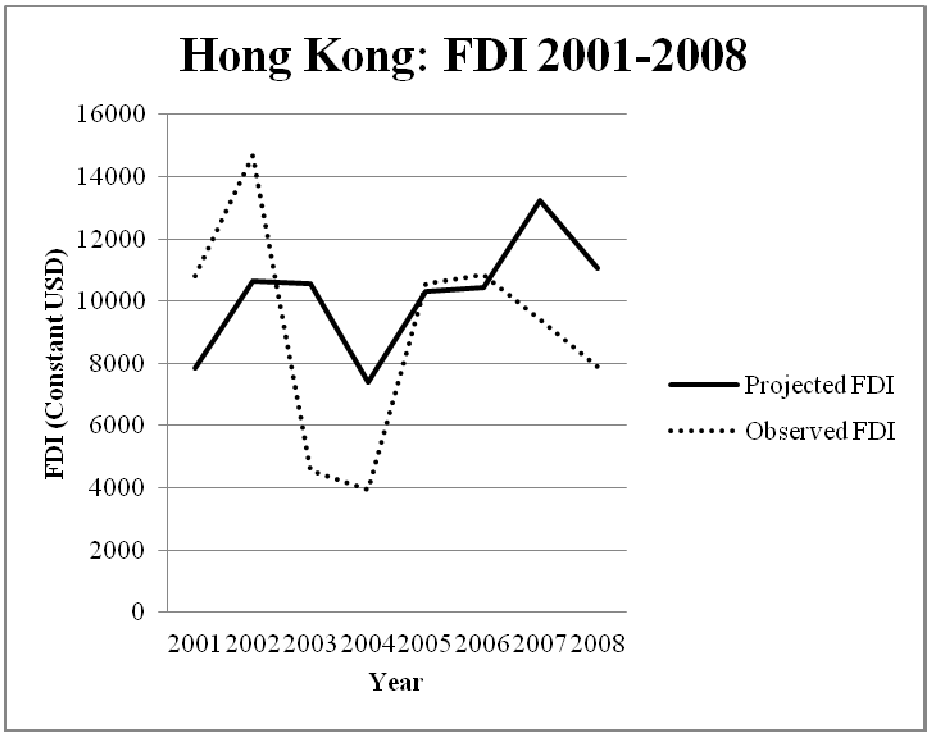

Ecuador: FDI 2001-2008
2000
0
-2000
-4000
-6000
-8000
-10000
-12000
2001 2002 2003 2004 2005 2006 2007 2008
FDI (Constant USD)
Year
Projected FDI
Observed FDI

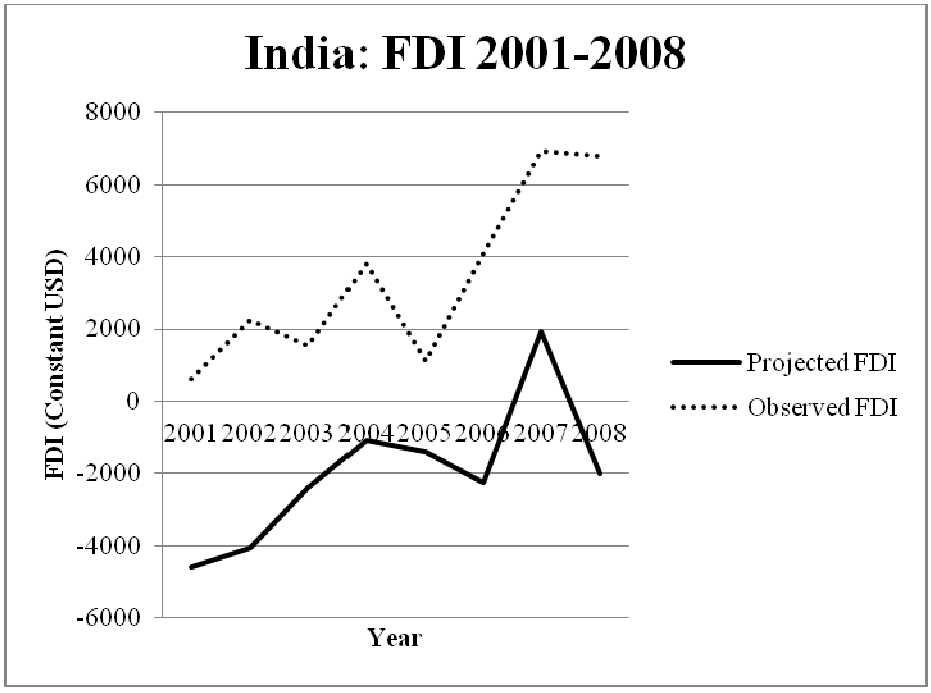

Egypt: FDI 2001-2008
3000
2000
1000
0
-1000
-2000
-3000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

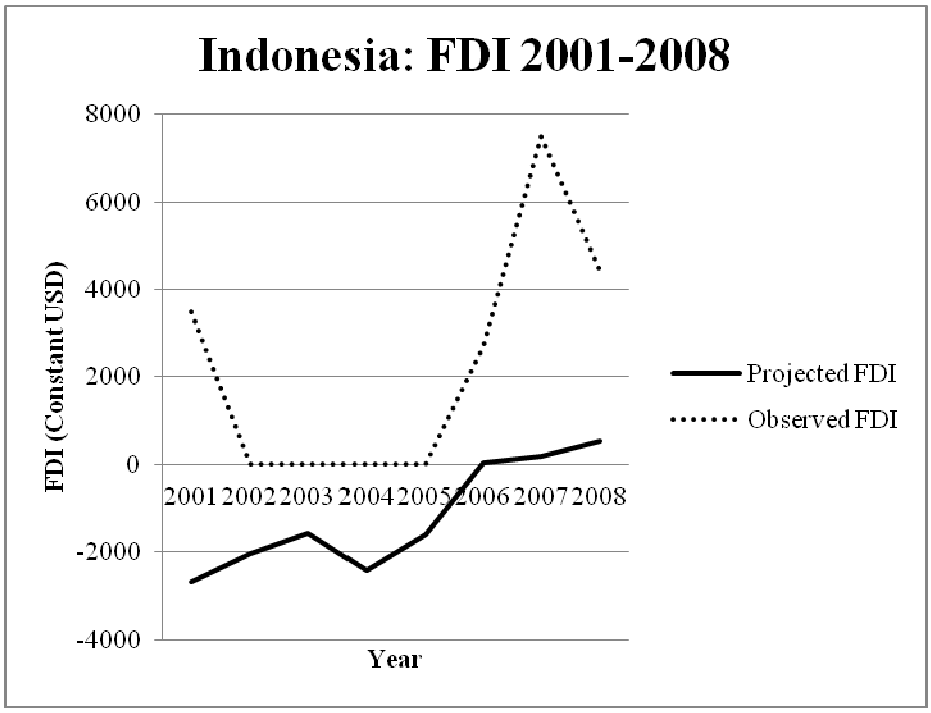

France: FDI 2001-2008
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

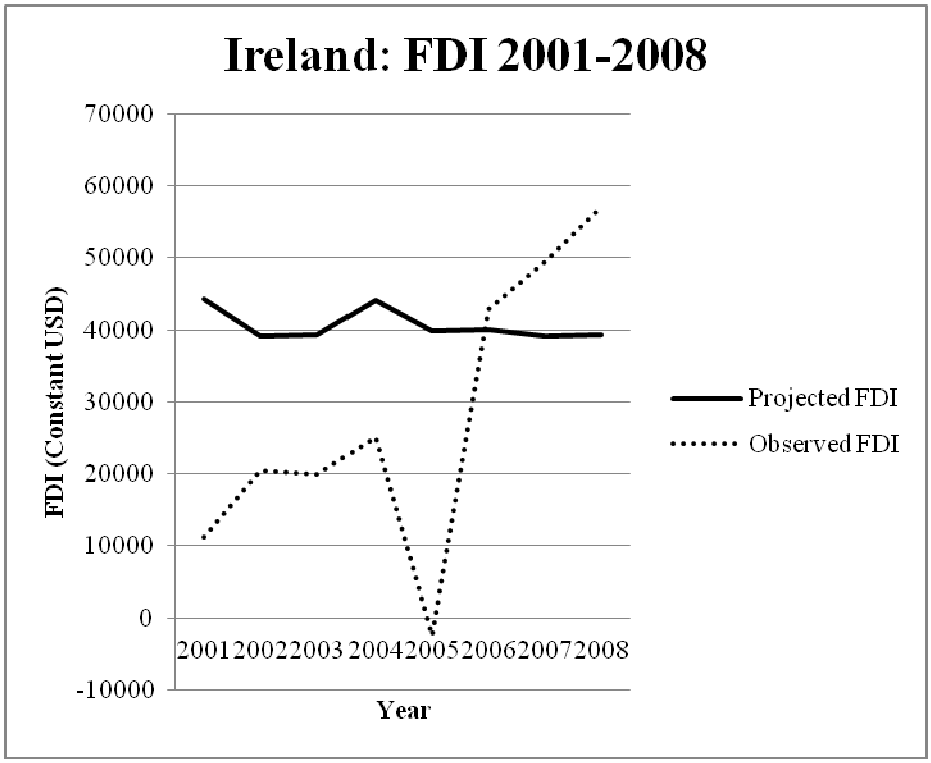

Germany: FDI 2001-2008
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

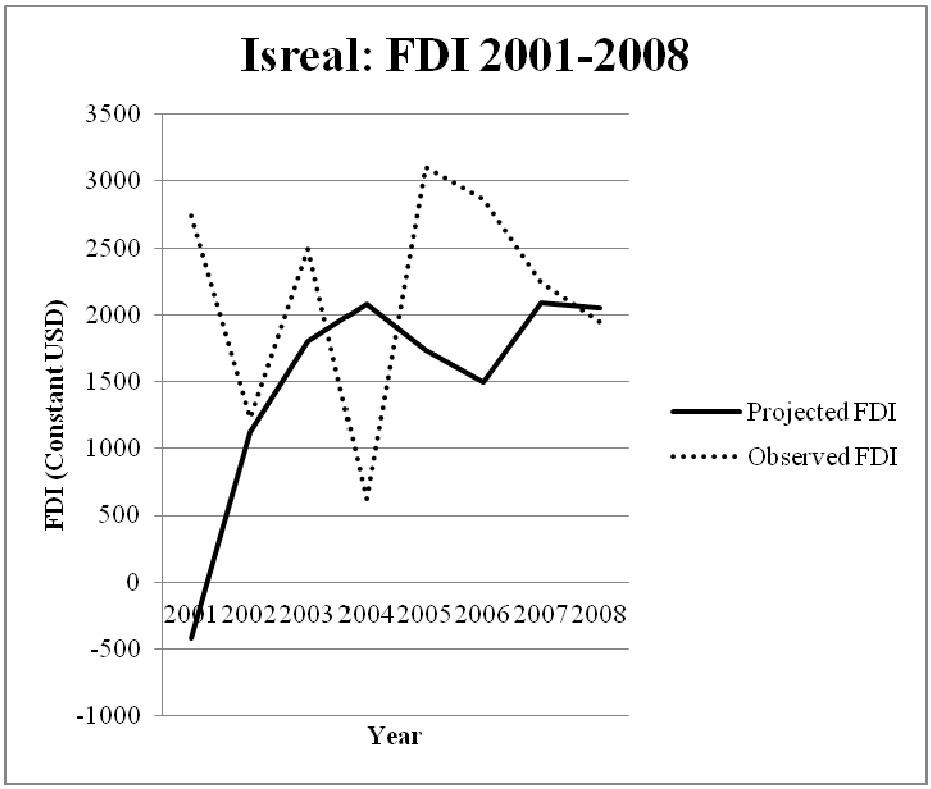

Honduras: FDI 2001-2008
6000
5000
4000
3000
2000
1000
0
-1000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

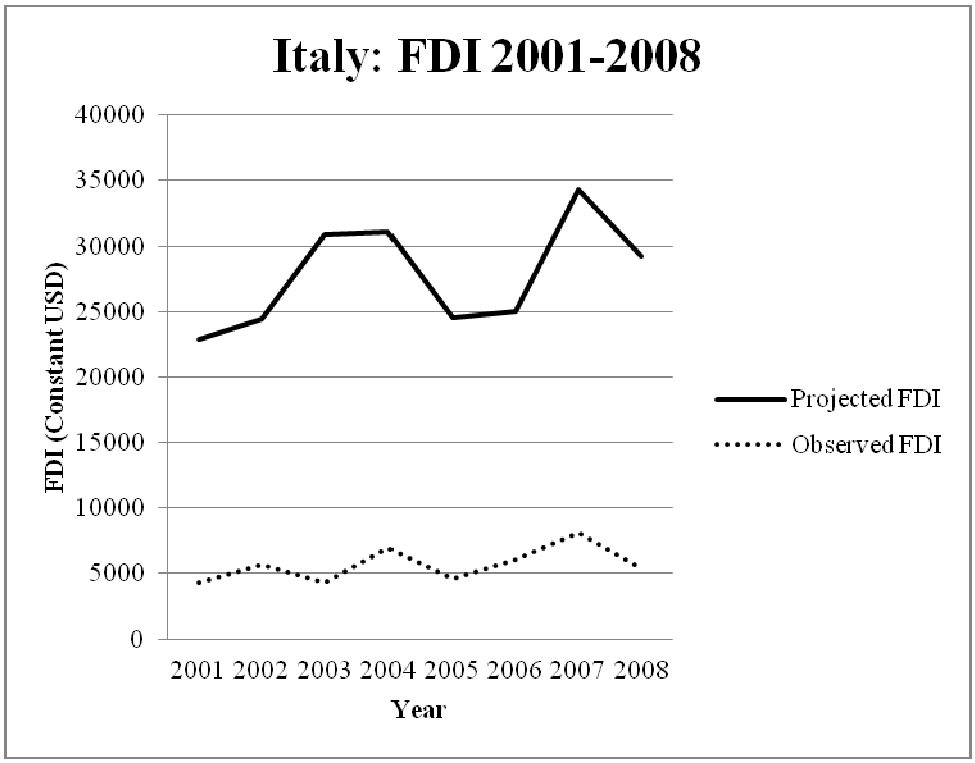

Hong Kong: FDI 2001-2008
16000
14000
12000
10000
8000
6000
4000
2000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

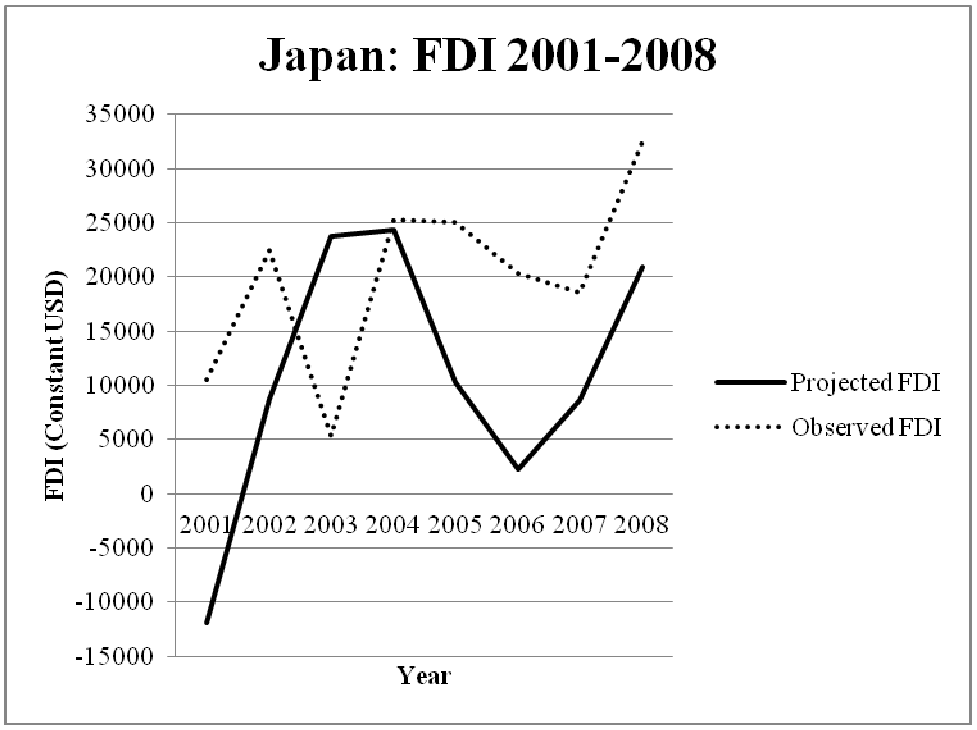

India: FDI 2001-2008
8000
6000
4000
2000
0
-2000
-4000
-6000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

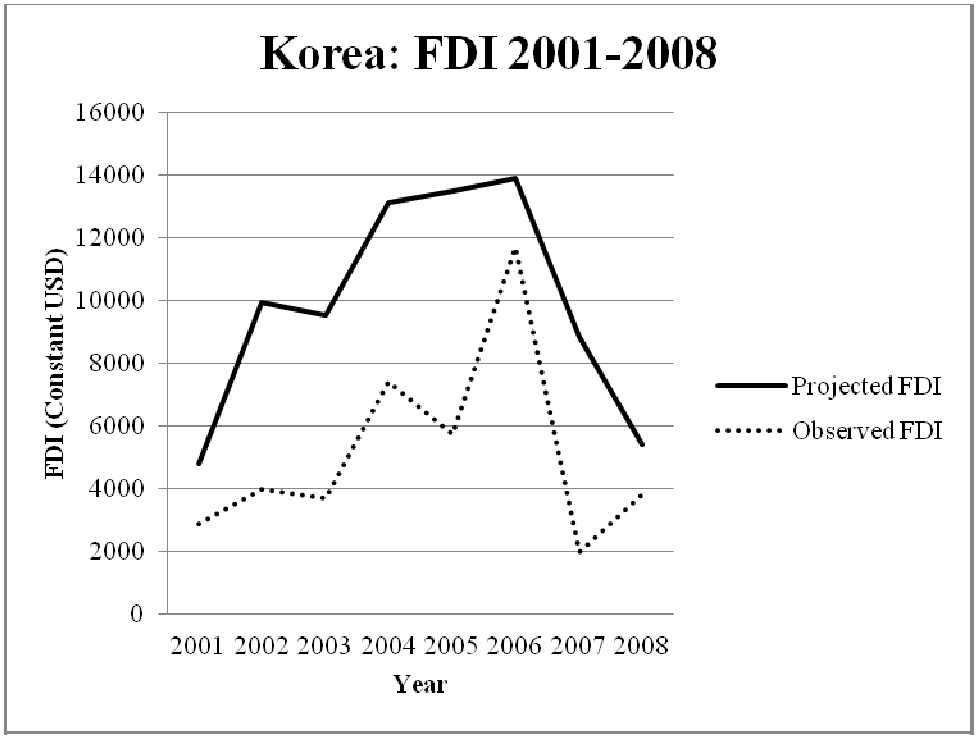

Indonesia: FDI 2001-2008
8000
6000
4000
2000
0
-2000
-4000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

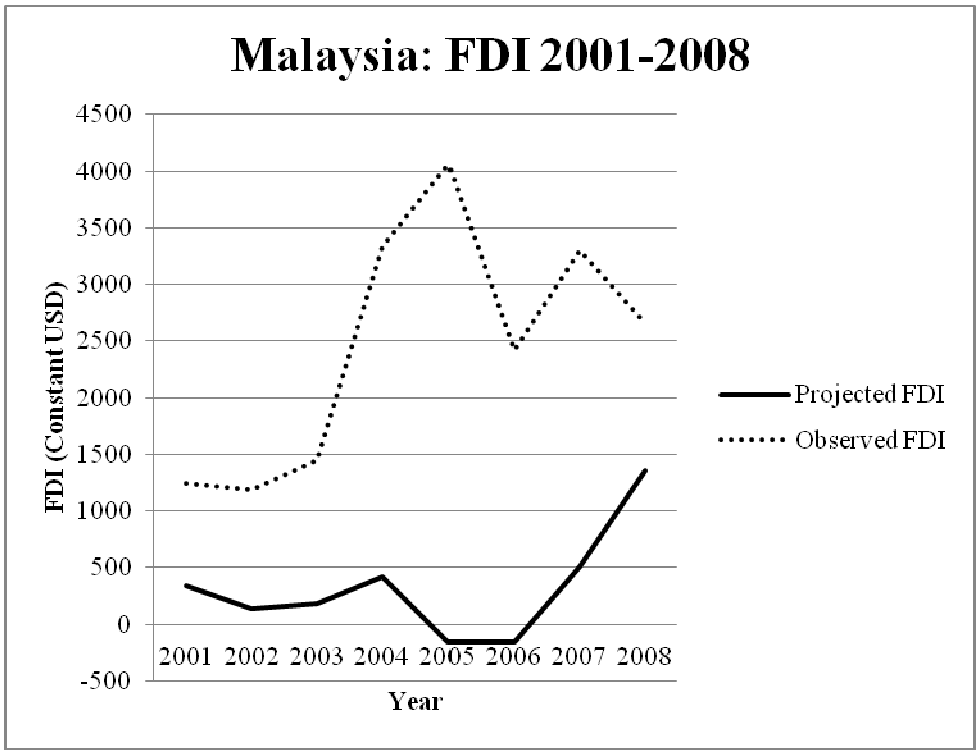

Ireland: FDI 2001-2008
70000
60000
50000
40000
30000
20000
10000
0
-10000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

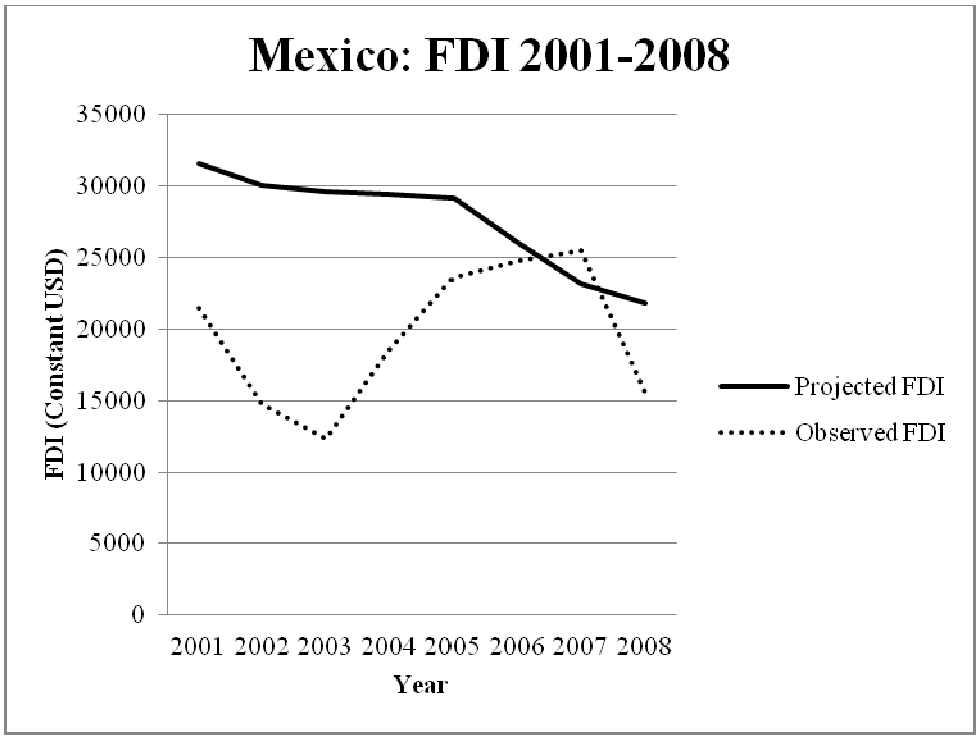

Isreal: FDI 2001-2008
3500
3000
2500
2000
1500
1000
500
0
-500
-1000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

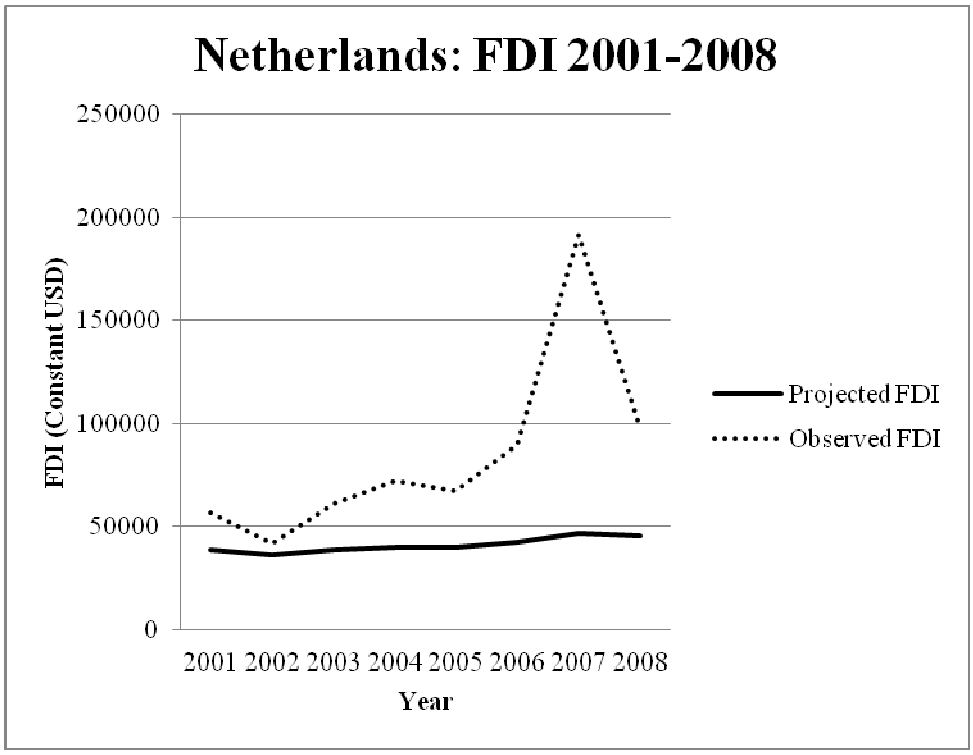

Italy: FDI 2001-2008
40000
35000
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

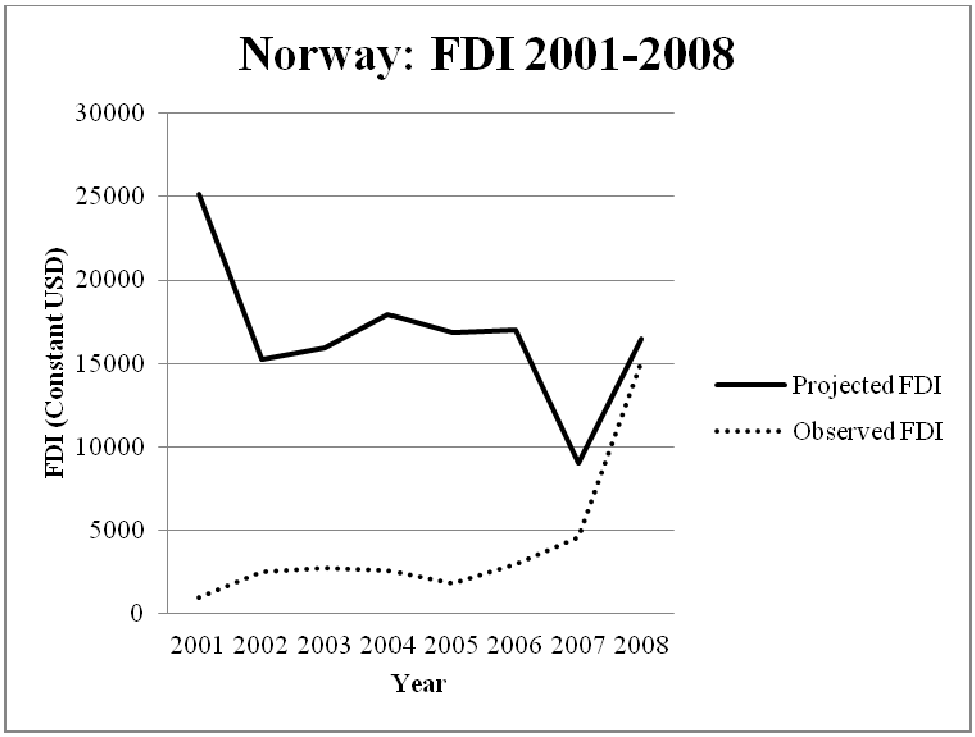

Japan: FDI 2001-2008
35000
30000
25000
20000
15000
10000
5000
0
-5000
-10000
-15000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

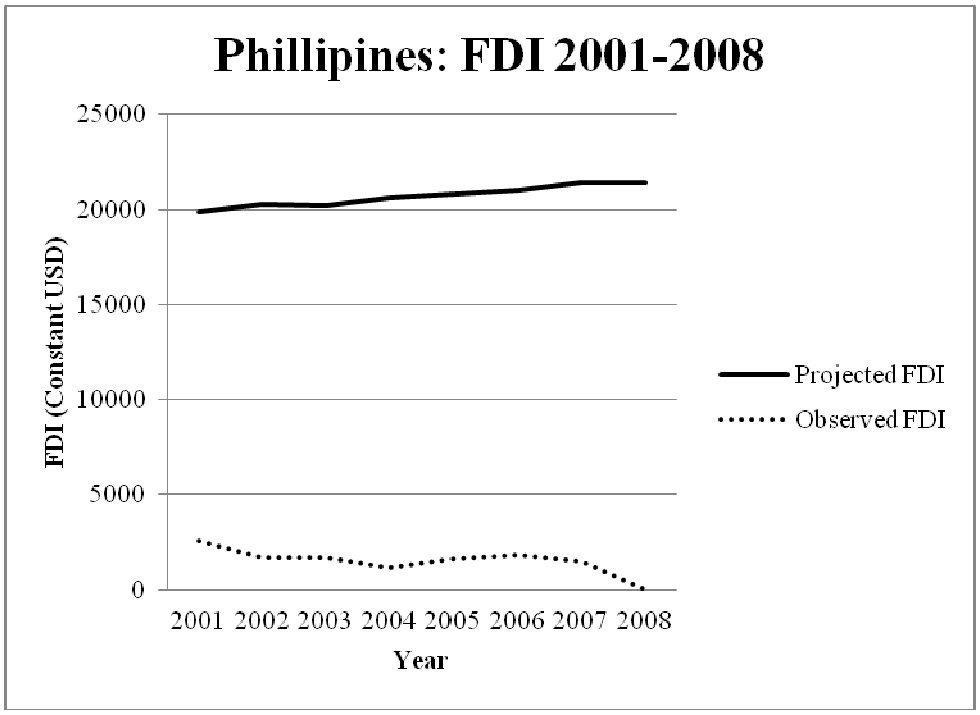

Korea: FDI 2001-2008
16000
14000
12000
10000
8000
6000
4000
2000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

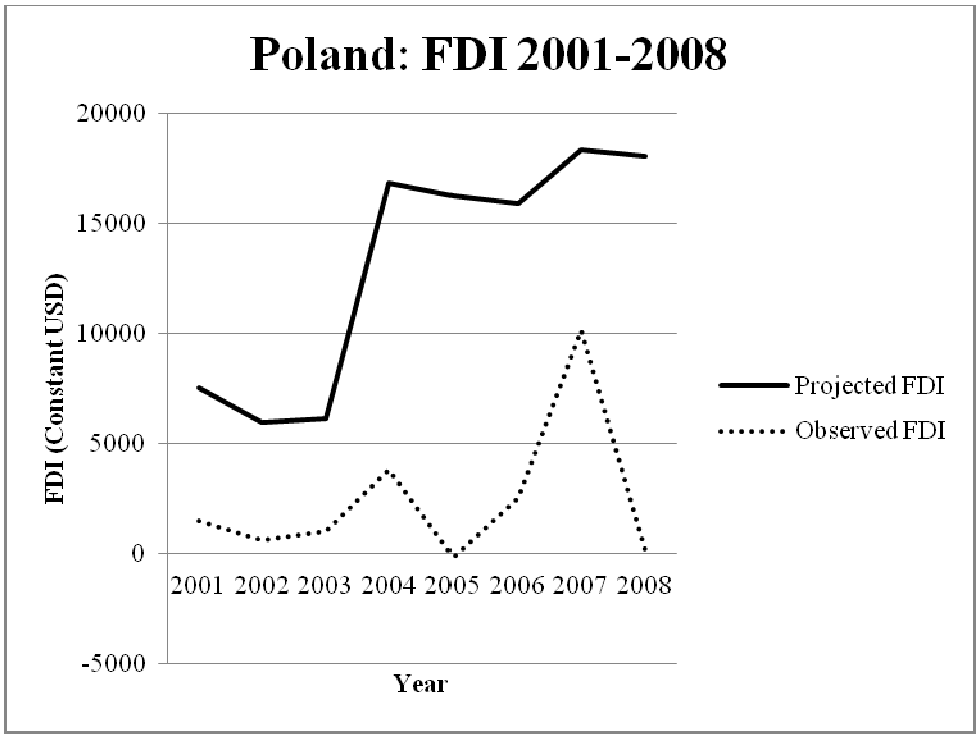

Malaysia: FDI 2001-2008
4500
4000
3500
3000
2500
2000
1500
1000
500
0
-500
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI


Mexico: FDI 2001-2008
35000
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

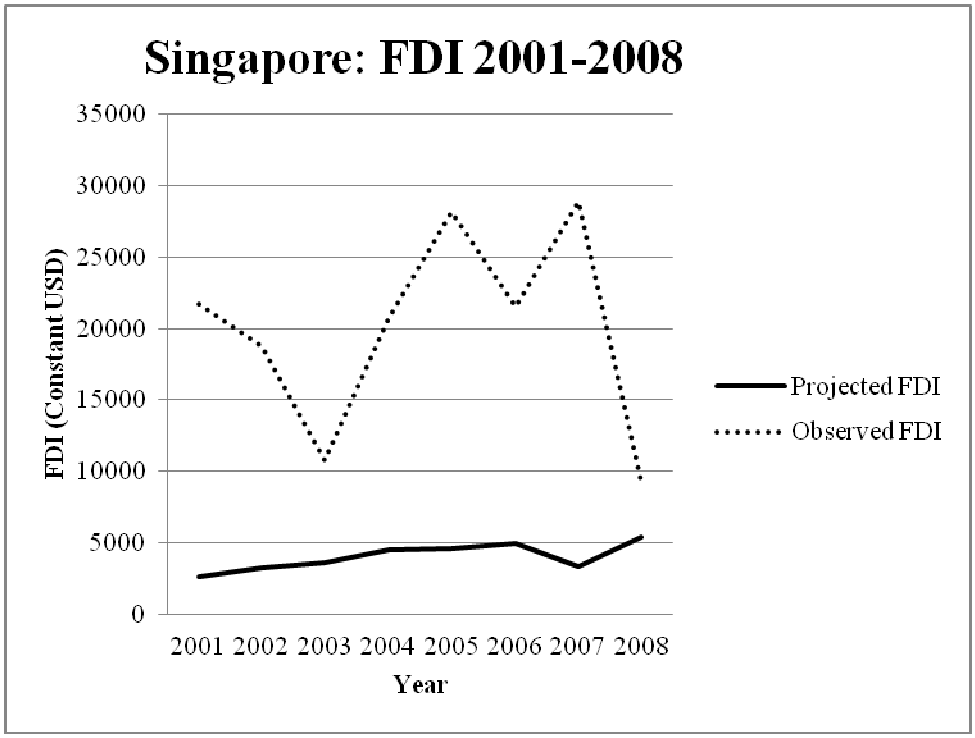

Netherlands: FDI 2001-2008
250000
200000
150000
100000
50000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

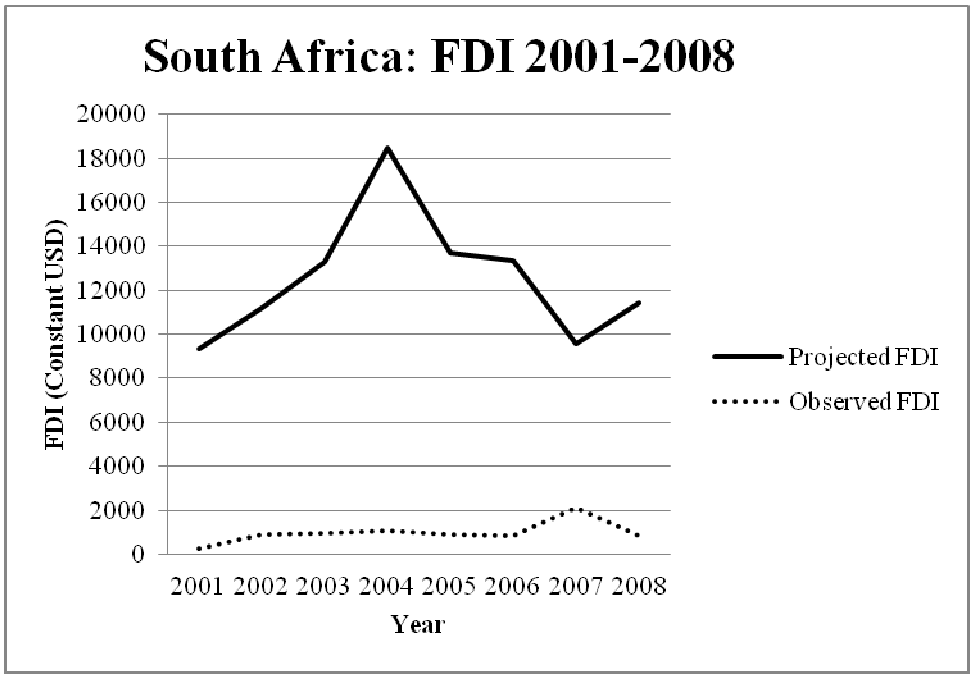

Norway: FDI 2001-2008
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

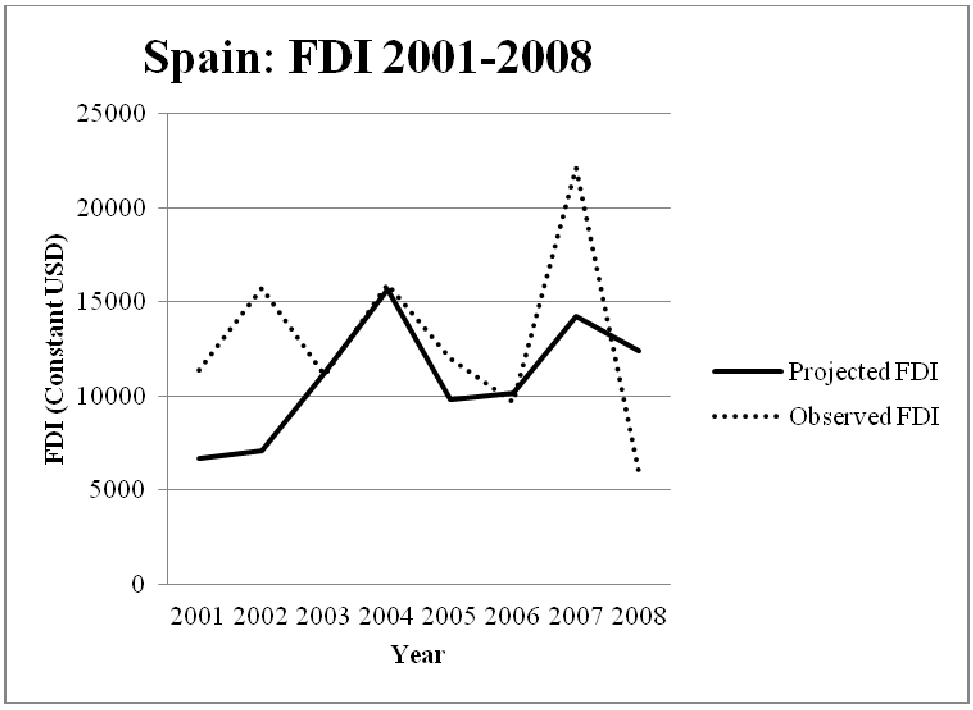

Phillipines: FDI 2001-2008
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

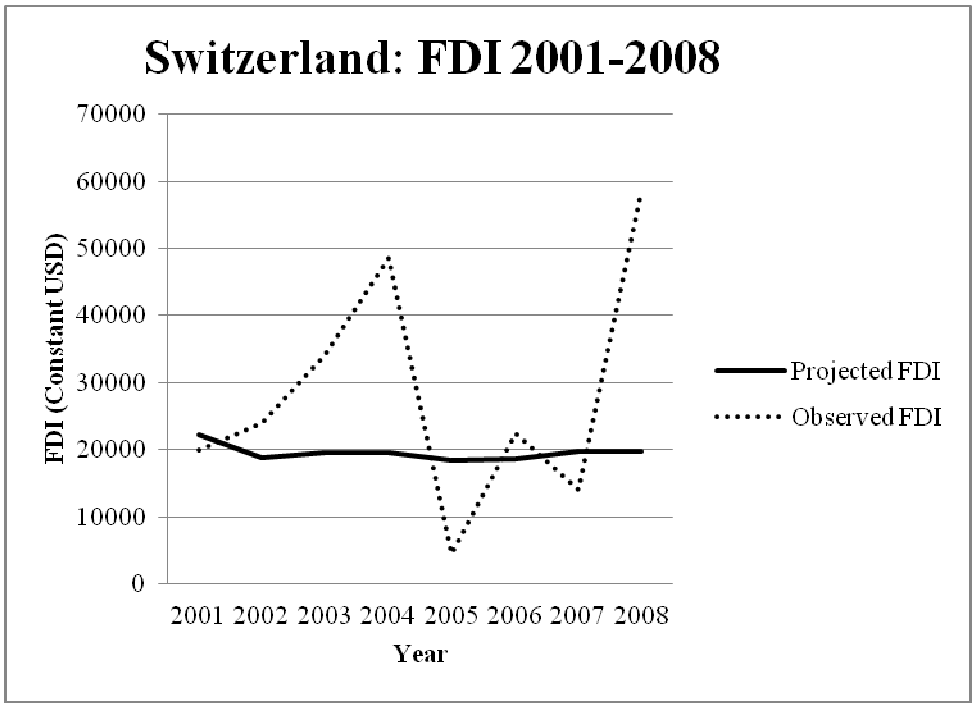

Poland: FDI 2001-2008
20000
15000
10000
5000
0
-5000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

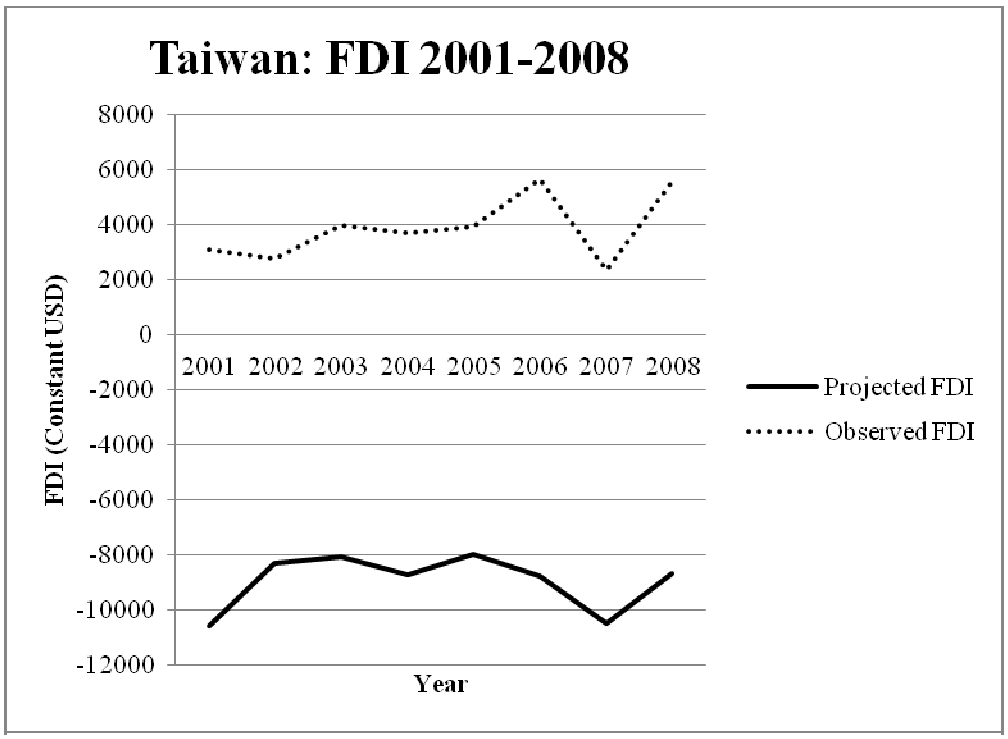

Russia: FDI 2001-2008
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
-2000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

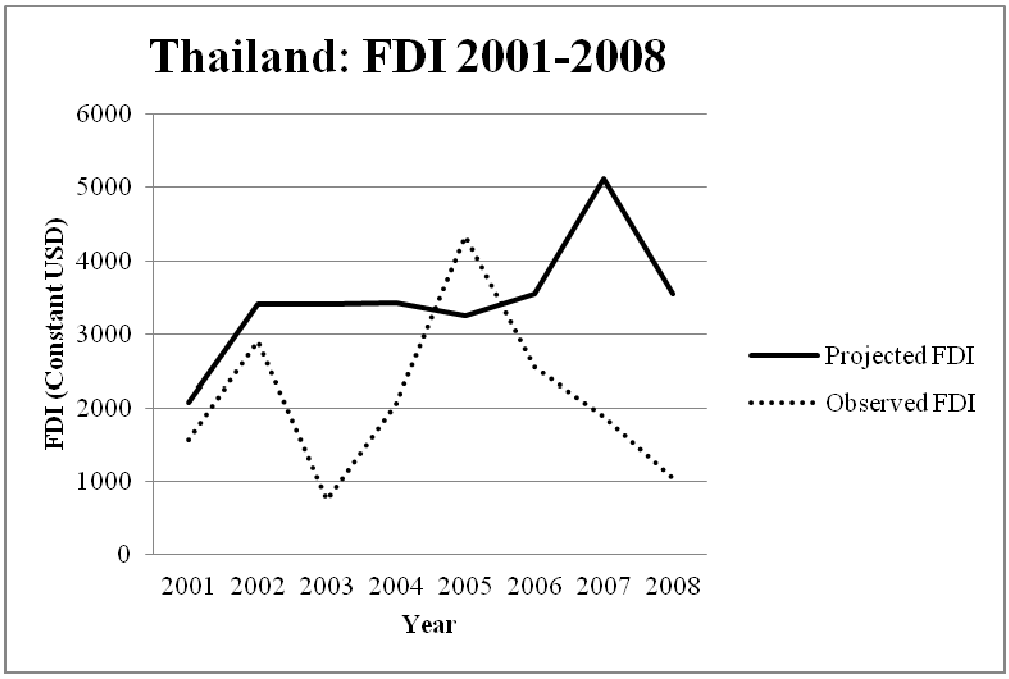

Singapore: FDI 2001-2008
35000
30000
25000
20000
15000
10000
5000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

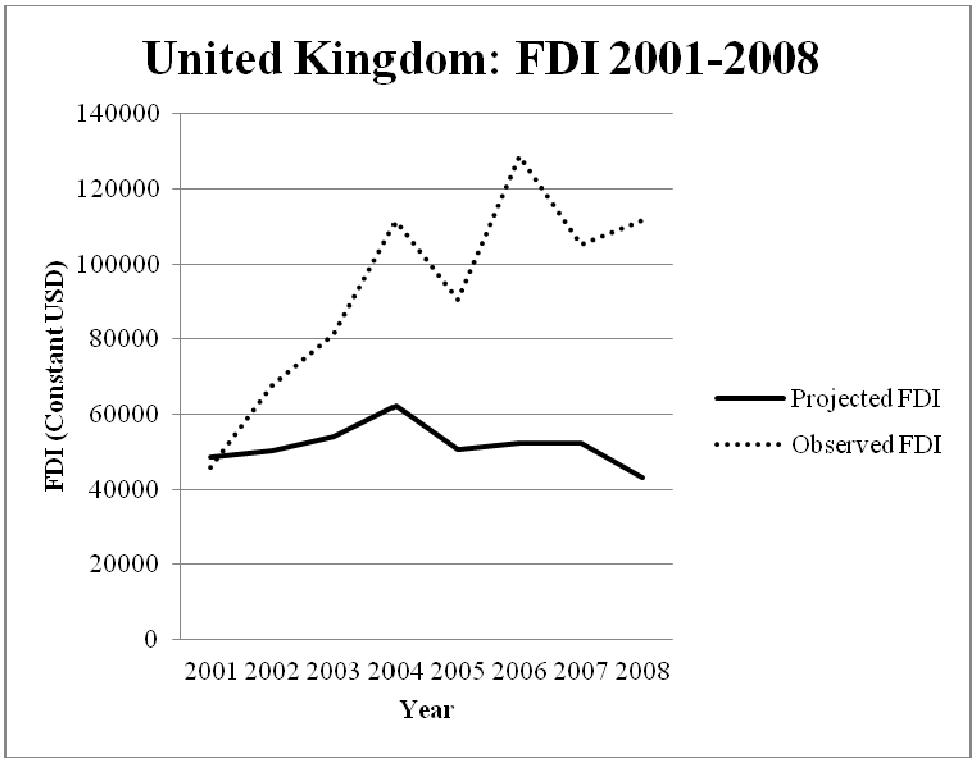

South Africa: FDI 2001-2008
FDI (Constant USD)
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI

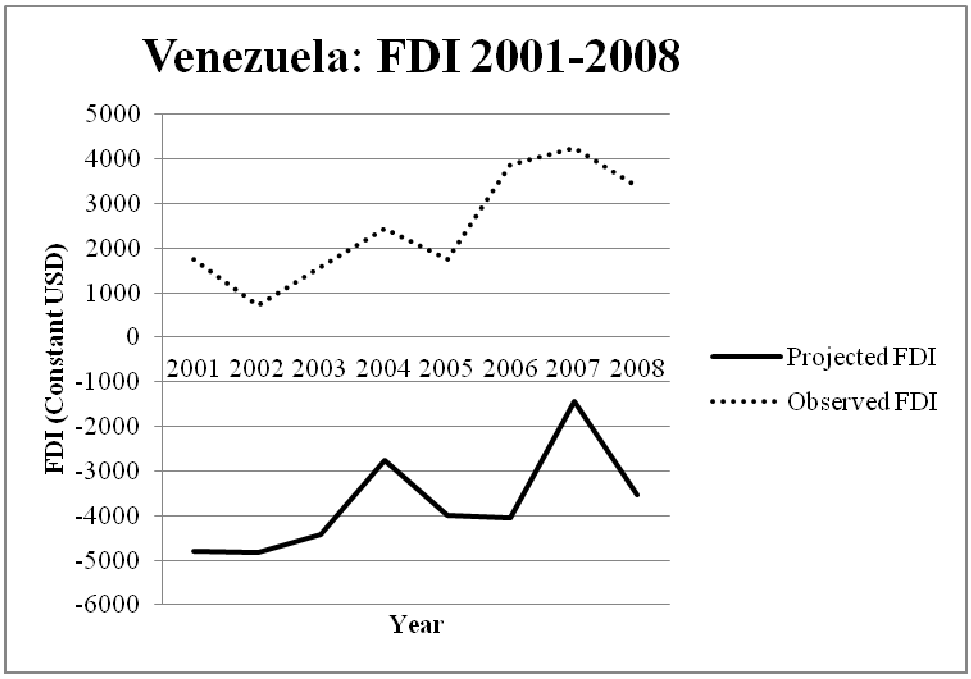

Spain: FDI 2001-2008
FDI (Constant USD)
25000
20000
15000
10000
5000
0
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI


Switzerland: FDI 2001-2008
70000
60000
50000
40000
30000
20000
10000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI


Taiwan: FDI 2001-2008
8000
6000
4000
2000
0
-2000
-4000
-6000
-8000
-10000
-12000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI


Thailand: FDI 2001-2008
6000
5000
4000
3000
2000
1000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI


United Kingdom: FDI 2001-2008
140000
120000
100000
80000
60000
40000
20000
0
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI


Venezuela: FDI 2001-2008
5000
4000
3000
2000
1000
0
-1000
-2000
-3000
-4000
-5000
-6000
FDI (Constant USD)
2001 2002 2003 2004 2005 2006 2007 2008
Year
Projected FDI
Observed FDI